

Customer Intelligence:

Proactive Approaches to Cleanup and Maintaining Customer Master Data

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Topics

Master Data Management (MDM)

Trading Community Architecture (TCA)

Case Study 1 – ATI Wah Chang

Case Study 2 – Mutual Materials

Case Study 3 – “*Company Y*”

What Is MDM?

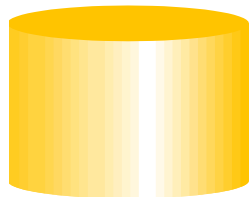
Master Data Management

- Not a Transaction, but Builds Transactions
- Centralization of Core Business Data:
Common Point of Reference
- Core Business Data Quality Improvement

Why MDM?

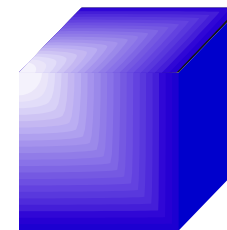
Master Data is critical to any Information System:

Transactional (OLTP)



Impacts Process Flow

Analytical (OLAP)



Impacts Reporting



Why Worry About MDM?

1. Pervasiveness of the problem
2. Critical nature of the information
3. Bang for the buck
4. Intangibles (user confidence)

Gartner 2005 Survey: 75% of respondents indicated they were facing significant data management problems stemming from master data issues.

Why Manage Your Customer Data with TCA?

Associate Marketing Campaigns to Sales

Modeling Your Prospects and Customers More Granularly
Positions You to Serve Them Better

Customer Data Will be Ready for an R12 Upgrade

Customer Data Errors Marginalize the Use of Cube-based
Analytical Tools (e.g. Hyperion)

Accurate Customer Data Allows Clear Definition of Demand
Channels for Future Flow Manufacturing Lead Time and/or
Ordering Cycle Discipline

Ability to Fully Model Individuals and Organizations for Both B2B
and B2C

What is TCA?

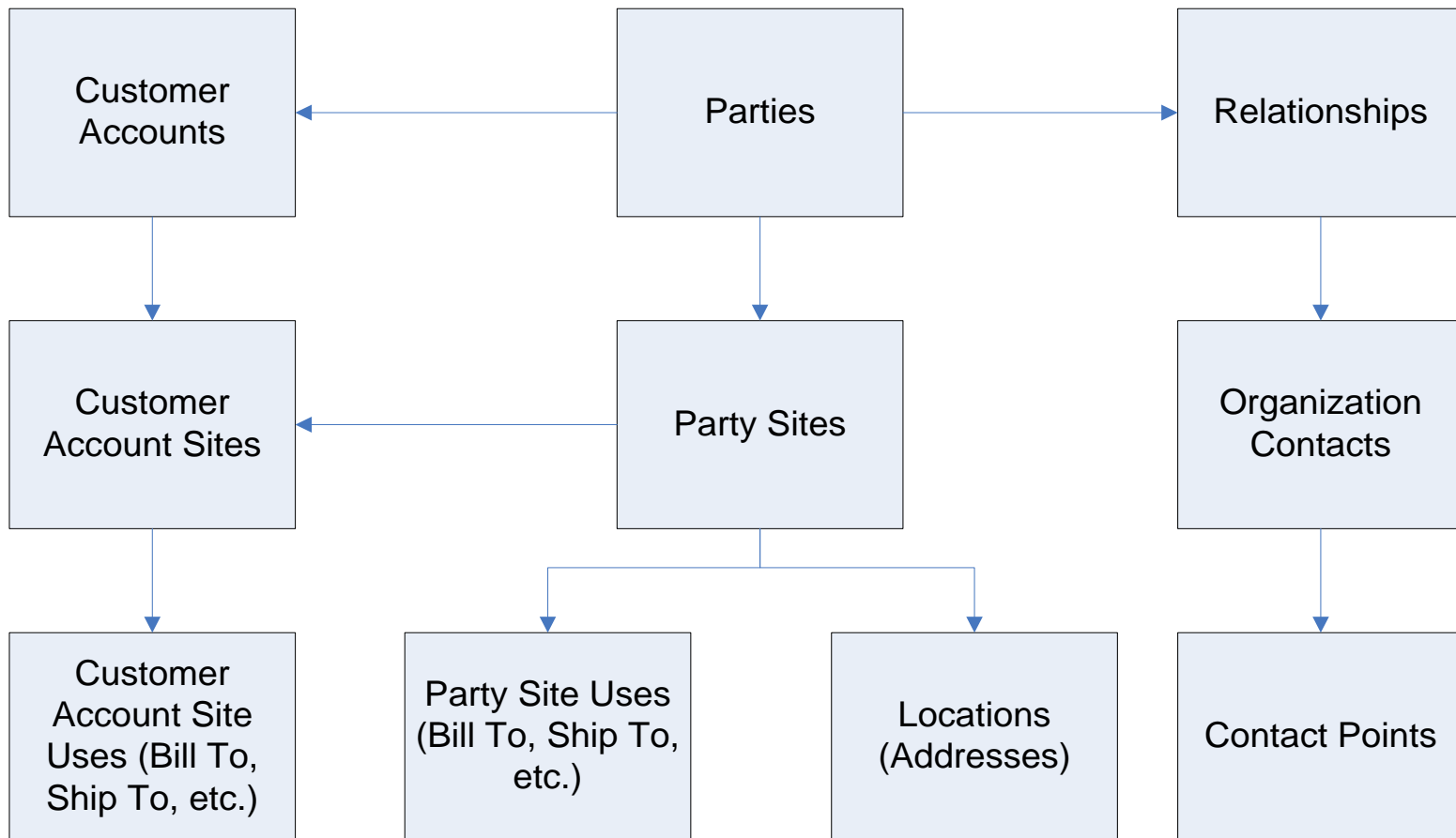
Oracle's Trading Community Architecture

Satisfies centralization needs

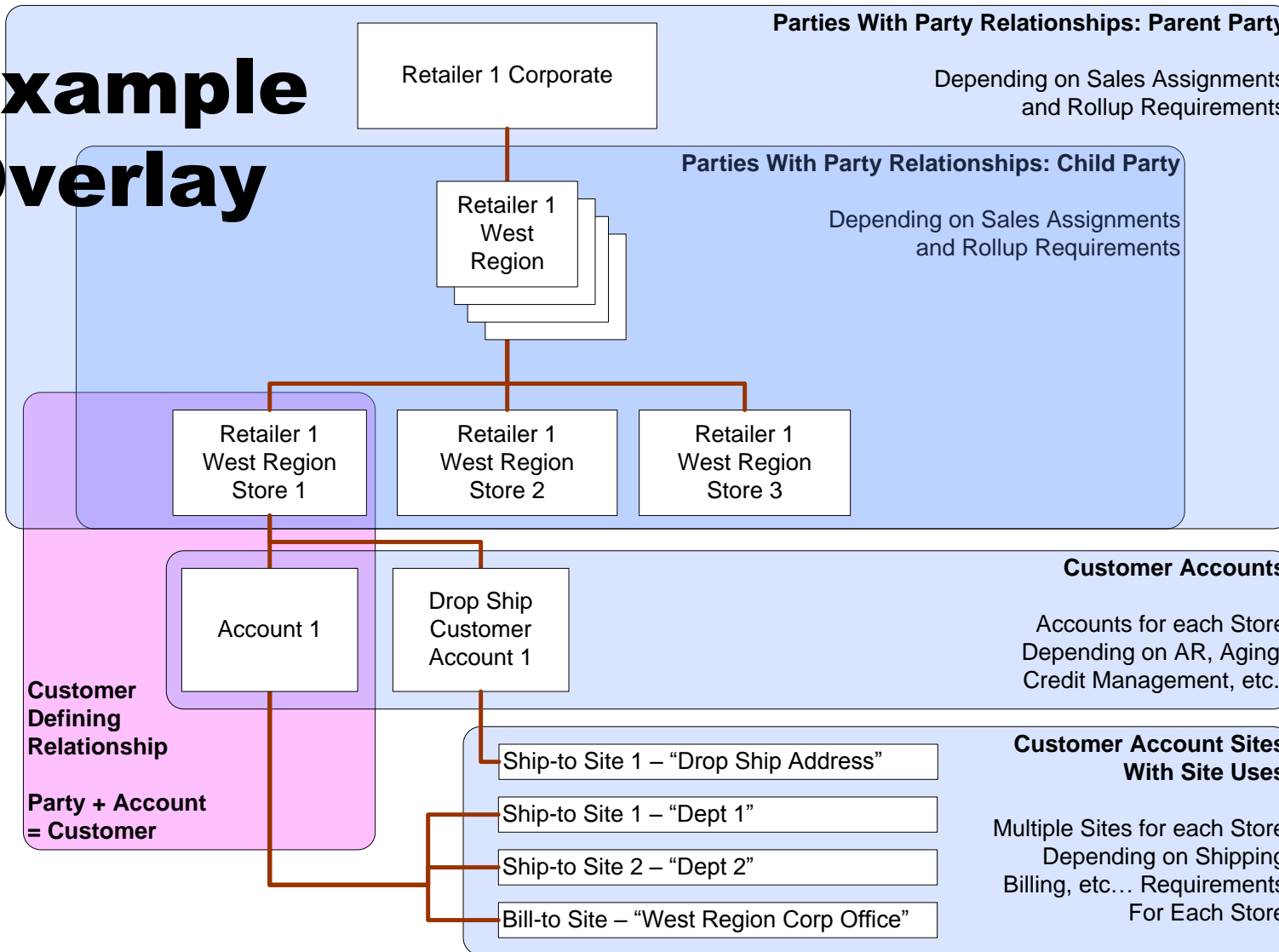
Stores common data relationships between persons and/or organizations

Allows for single customer data objects used across functions (Party can be a customer, an employee, and starting in R12 a vendor)

What is TCA?



Example Overlay



Marketing, Lead Generation, Selling is Relationship Based

Selling is Transaction Based & EDI Intensive

Case Study 1

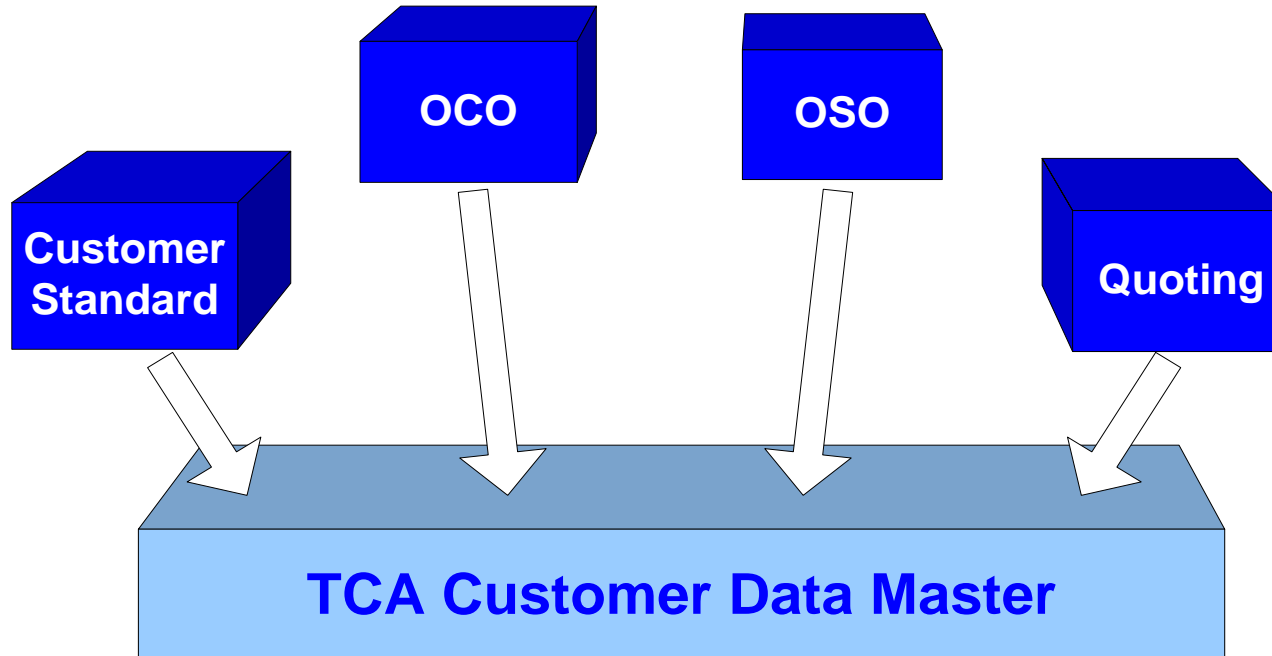


Case Study – **ATI Wah Chang**

Company Profile:

- Global manufacturer of specialty and exotic metals
- Diverse customer base in 80+ countries
- Long-time Oracle EBS user (11.5.10.2)
- Highly distributed environment
- Centralized customer master (TCA)
- Multiple master data entry paths to single source

Case Study - **ATI Wah Chang**



Multiple master data entry paths to single source

Case Study - Problem Definition

Data Issues

Malformed Customer Data
resulting in:

- 3 out of 4 order lines experienced at least one error in transactional processing
- Hundreds of individual reported issues
- User apathy, lack of trust in system
- IT support center overload

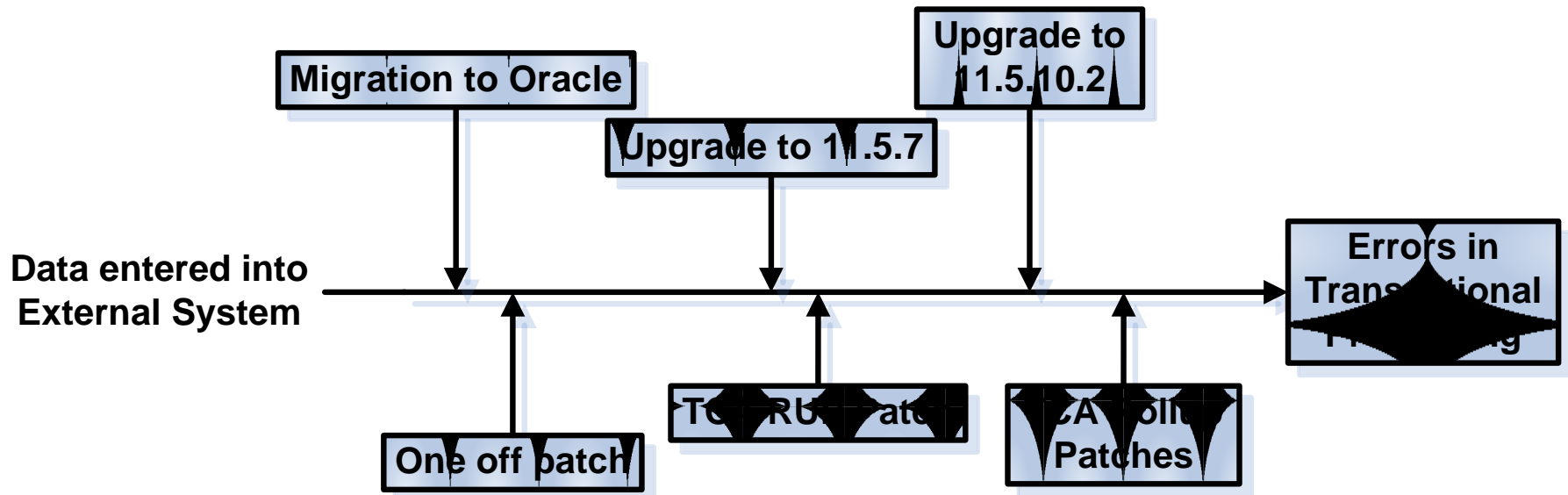
Root Causes

Root Cause Analysis:

- Consolidation of master data without data cleansing
- Multiple upgrades, multiple patches
- Use of de-supported and un-patched products
- Lack of user training on use of application
- Poorly defined business processes

Case Study – Problem Definition

Timeline of Induced Data Anomalies



Case Study – Solution Options

Possible Alternatives and Approaches:

- Re-implementation of 11.5.10.2
 - Still need to clean the data before conversion
- Implementation of R12
 - Large endeavor to address Customer Data
- Deactivate old records and re-enter clean customer data
 - Without merging or data conversion, lose history
- Clean data “in-place”



Case Study – Solution Approach



Phase I – Requirements Gathering and Proof of Concept

Phase II – Classification of the information

Phase III – Development of solutions - highest priority fixes first

Phase IV – Expansion of the solution scripts

Phase V – Operation and Maintenance



Case Study–Phase 1

Requirements and Proof of Concept Phase

- Identified one bad customer with multiple known and reproducible issues: **“Customer G”**
- Re-entered “Customer G” via Customer Standard form as “new” customer: **“Customer G New”**
- Using AR Customer Diagnostic Report, compare bad records with good records
- Extrapolate the 78 error conditions across entire data set



Case Study – Phase 2

Classification Phase

Class	Description	Examples	Solutions
1	Incorrect default values	<ul style="list-style-type: none"> •NULL values in required fields •Fields with obsolete values 	Status is a required attribute Solution: Update NULL values to 'A' or 'I'
2	Multiple records found where single records expected	<ul style="list-style-type: none"> •Site has multiple active site uses •Site has multiple primary loc 	<ul style="list-style-type: none"> •Patch overwritten during project, had to be re-applied Solution: Apply patch 4582924
3	Malformed TCA relationship records	Merged party related to non-merged record	Solution: Merge relationship record properly
4	Inconsistent data states within or across records	<ul style="list-style-type: none"> •Inactive party has active party sites •Identifying account site refers to inactive party site 	Solution: Set Party Site records inactive

Case Study – Phase 3

Implementation

- Develop a Report to Group all Classifications – Produced over 78 individual data conditions
- Automatic update (Sys Admin Only) or manual review
- User-friendly issue description and corrective action
- Detailed resolution statement



Issue Summary Report Example

Class Code	Description	Count	Classification Total
1-1	Customer Account: account_liable_flag did not default	9,378	
1-2	Customer Account: hold_bill_flag did not default	8,507	
1-3	Customer Account: dormant_account_flag did not default	8,507	
1-4	Customer Account: arrivalsets_include_lines_flag did not default	17,048	
1-5	Customer Account: sched_date_push_flag did not default	17,050	
1-31	Organization Contact: Status is null	12,773	
1-32	Party Site Use: primary_per_type is null	93	456,495
2-1	Multiple Accounts for a single party record	75	
2-4	Multiple Account Sites for a single Party Site	99	174
4-1	Status: Party Site = Active, Party = Inactive	4,573	
4-2	Status: Customer Account = Active, Party = Inactive	20	
4-3	Status: Account Site = Active, Party = Inactive	4,533	

Customer data de-normalized and presented to the user in a logical, actionable format



Case Study – **ATI^{Wah} Chang** Results

95+% Reduction in Quote-to-Cash Error Rate

Technical Result	Business Impact
<p>171,764 individual automatic field changes for 3800+ customer master records</p>	<ul style="list-style-type: none"> • 100% resolution of known issues related to missing data field values. • Data aligned with Oracle specifications
<p>8,625 “Manually Reviewed” records covering 1,240 customers</p>	<ul style="list-style-type: none"> • 100% resolution of reported help desk issues • User-driven review and repair approach resulted in business process improvements and retraining of users.
<p>Identification of 14 new technical issues leading to Oracle Bug Reports and Patches</p>	<p>Elimination of technical roadblocks to Quote-to-Cash process that had been pain points for up to 3 years.</p>

Case Study 2



Case Study 2 – Mutual Materials

Company Profile:

- Leading manufacturer and distributor of masonry and hardscape products in the Pacific Northwest: both commercial and residential
- 10 manufacturing facilities in Oregon, Washington and British Columbia
- 4 DCs with 17 Retail Locations
- Customer types vary: DIYs, Retailers, Contractors, Architects, Developers
- In Business Over 100 Years



Case Study 2 – Mutual Materials

Mutual Materials' Challenges:

- Undefined TCA data model for each type of customer
- Cleanup and Configuration of Known Issues: similar to Wah Chang's data issues
- Lack of clear ownership for customer data: Finance or Marketing?
- Lack of visibility into definitive customer models, impact of merges and validations
- External lead generation sources imported, but not synced with TCA Customer model(s).



Case Study 2 – Mutual Materials

Customer MDM Project Objectives:

- Consistent Customer Models Using TCA
- Clean Up Existing Customer Data
- Ongoing Customer Master Maintenance
- Reporting



Case Study 2 – Mutual Materials

Phase 1: Business Requirements

- Finalize Customer Models and Reporting Requirements
- Assess Lead Import Process and Marketing Customer Database
- Establish Customer Master Data Stewardship and Librarian

Phase 2: Data Clean Up with Incremental TCA, Reporting

- Utilize Customer Data Intelligence Toolkit to Correct Data Problems
- Map Current Customers to Target Models: Incremental TCA Adoption
- Refine Lead Import Process, Set Up DQM, Address Validation

Phase 3: Ongoing Maintenance, Full TCA Adoption, Reporting

- Finalize Customer Models
- Integrate and Eliminate Marketing Database

Phase 4: Integrate Sales and Marketing

- Data Librarian Controls Customer data from Quote to Order and Ongoing
- Forecast Sales in Oracle: Influencer and Customer Accounts

Case Study 2 – Mutual Materials

Customer MDM Project Initial Assessment:

Error Class	Description	Examples	Data Value Counts
1	Incorrect default values	<ul style="list-style-type: none"> •NULL values in required fields •Fields with obsolete values 	456,495
2	Multiple records found where single records expected	<ul style="list-style-type: none"> •Site has multiple active site uses •Site has multiple primary loc 	174
3	Malformed TCA relationship records	Merged party related to non-merged record	0
4	Inconsistent data states within or across records	<ul style="list-style-type: none"> •Inactive party has active party sites •Identifying account site refers to inactive party site 	79,150

Stay Tuned ...!

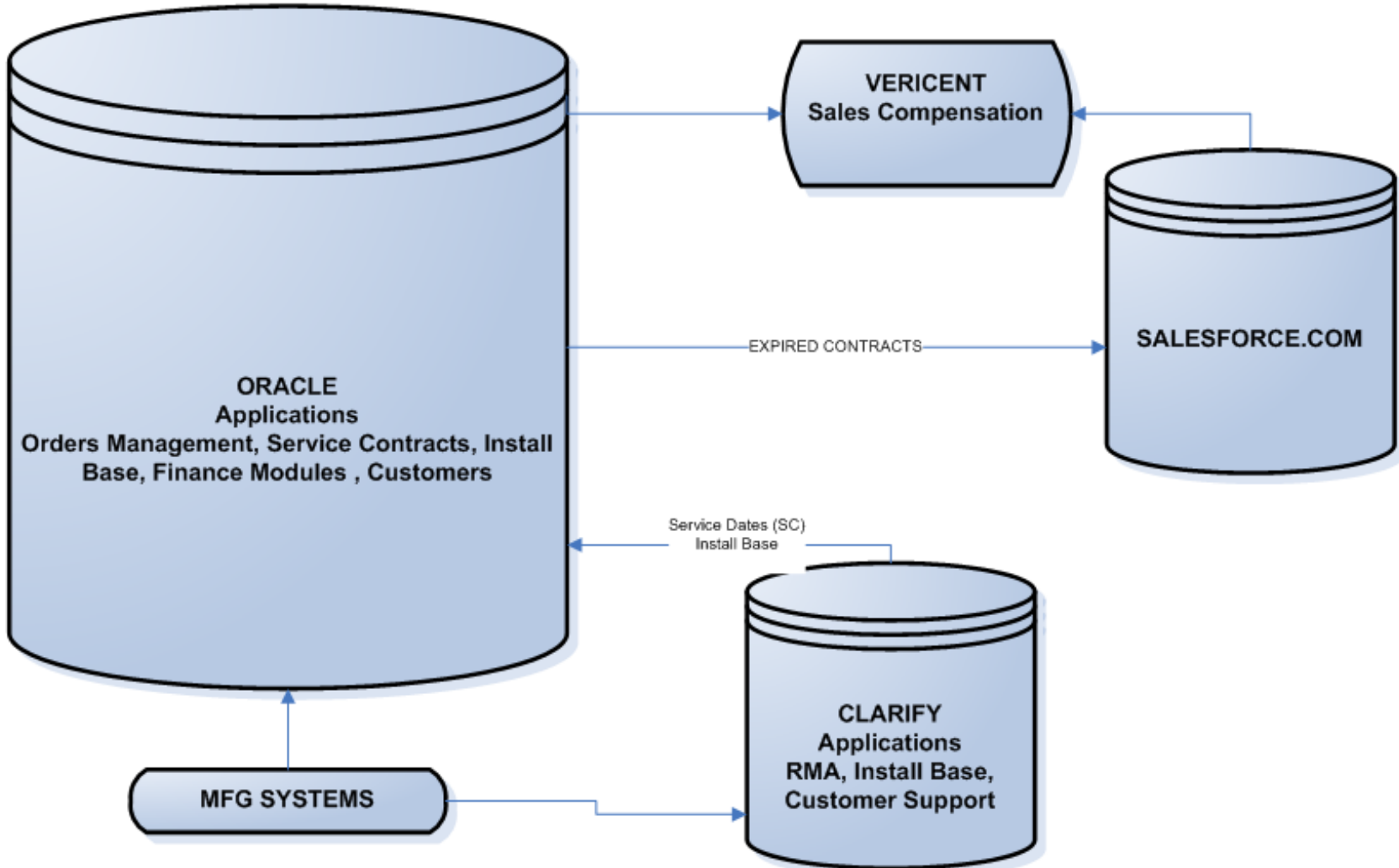


Case Study 3

Case Study 3 – “Company Y”

- Project is for a review of CRM business processes
- Challenges with quoting lead times and preventing data duplication
- ATI Wah Chang approach to be used as a part of the data cleanup phase
- Reusing the code and approach process reduces implementation time

Case Study 3—"Company Y" CRM Footprint



Conclusions

What Companies Can Benefit from Customer Data Clean up and MDM

- Companies facing data issues that impede Quote-to-Cash flow
- Companies anticipating an R12 upgrade
- Those who have upgraded and want to verify the integrity of their upgraded customer data
- Companies forming data stewardship and proactive customer data cleanup

Clean data leads to improved user efficiency