



Powerful solutions. Brilliant delivery.

C2M Gotchas

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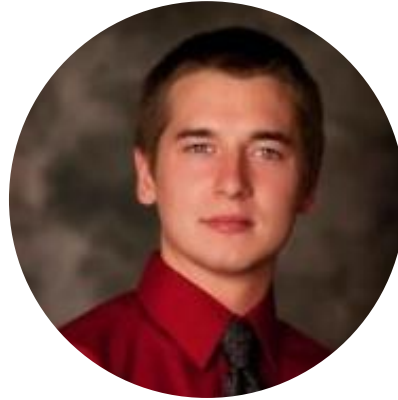
Presenter Introductions



Melissa Ortman

ALLETE

Programmer Analyst Lead



Ben Brose

ALLETE

Customer Process Analyst Senior



Allison Ritter

Triniti Consulting

Managing Consultant



ALLETE



AN ALLETE COMPANY

Minnesota Power

- 160,000 electric
- AMI deployment – 2009-2025



AN ALLETE COMPANY

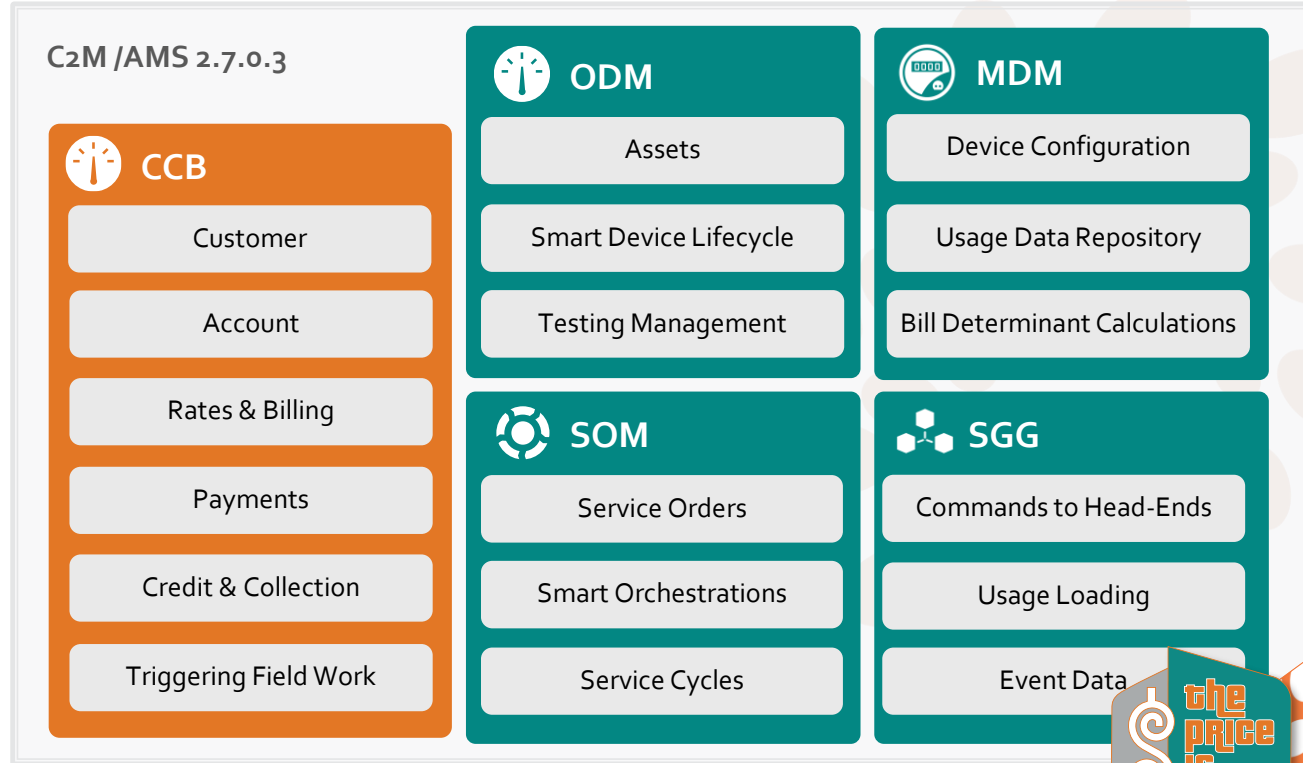
Superior Water, Light & Power

- 15,000 electric
- 13,000 natural gas
- 10,000 water
- AMI deployment – 2016-2020



Our Project

- Implemented CCB 2.4 in 2015
- Upgrading to C2M 2.7.0.3
- Implementing MDM, ODM, SOM, SGG
- August 2019 – Sep/Oct 2020



The Game



WE ANNOUNCE PRIZE

- Great prizes to give away
- Lots of appliances
- Special announcer to tell us about the prizes that could be yours!



WE GIVE PROMPT

- We will tell you a statement about a C2m Gotcha
- It may or may not be true



You VOTE & WIN

- You decide if you think it is true or false
- Utility votes only!
- Hold up your paddle
- First person that has the correct answer, WINS!



WE ELABORATE

- We will tell you more about the C2M Gotcha
- We will tell you how we solved it



The Gameboard



The
PIVOTS



The
OBJECTS



The
DATA



The
SYNC



PRIZE 1!!!

The Gameboard



The
PIVOTS



The
OBJECTS



The
DATA



The
SYNC

To calculate service quantities in C2M, either new Service Agreements, Service Points, and Rates need to be set-up or Service Agreement Type needs to be changed at go-live.



The Gameboard



The
PIVOTS



The
OBJECTS



The
DATA



The
SYNC

TRUE





Bill Determinant Pivot



Change from billing using meter usage in CCB to billing using bill determinants calculated in MDM.

Option 1

- Create New Service Agreement
- Switch on Bill Boundary

Option 2

- Switch Service Agreement Types to 'BD required' at Go Live
- Convert Reads to Support Estimations & Cancel/Rebill



PRO

- Meter Data History
- Clean Break
- History Preserved
- No Setup Changes
- Less Impact to C&C/Budget/Arrears/Bill Print



CON

- New SA/SP/Rate
- C&C/BB/Arrears Impacts
- Bill Print Impacts
- Conversion Reads/Usage Transactions
- Change Historic Rates





Meter/Meter Read Pivot



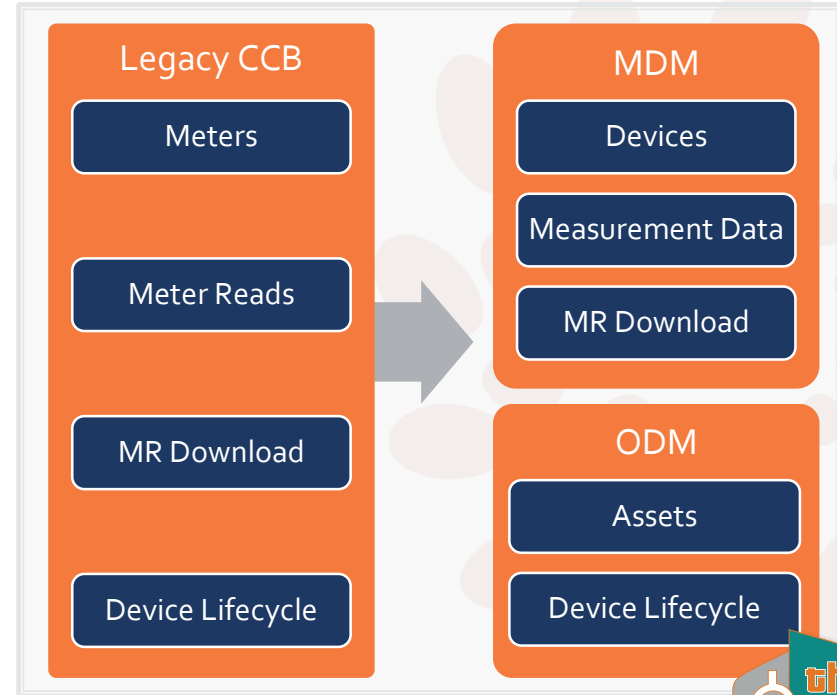
Change from meter information and reads in CCB to ODM being the system of record for Meters (Assets) and MDM be the system of record for reads.

Considerations

- Bill Determinants
- Meter Read Download File
- Asset Lifecycle and Testing
- Mass Creating Assets

Solution

- Convert Meters to ODM/MDM
- Create Meter Read Download File
- Custom Batch to Create Assets



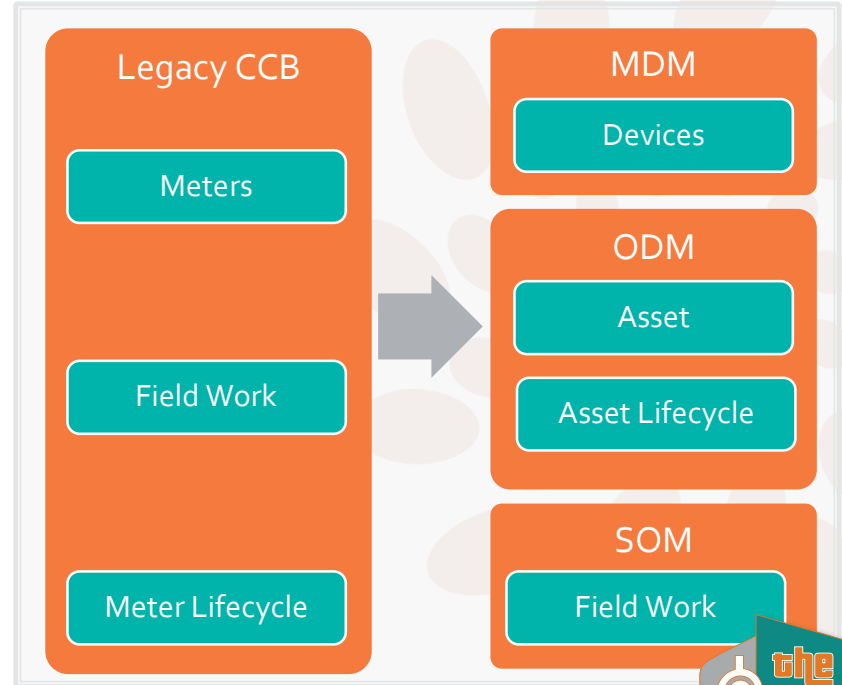


Considerations

- Field Activity Functionality Moved to SOM
- Dispatch Groups Do Not Exist in SOM

Solution

- Update Field Activity Types
- Convert PENDING Inflight Field Activities into SOM
- Analyze Completion Functionality
- Create Dispatch Group Extendable Look-up in SOM



PRIZE 2!!!

The Gameboard



The
PIVOTS



The
OBJECTS



The
DATA



The
SYNC

In C2M, all the modules reference the same Service Point which reduces duplication across the modules.



The Gameboard



The
PIVOTS



The
OBJECTS



The
DATA



The
SYNC

FALSE





Merged Maintenance Objects

- Service Point
- Service Type
- Service Point Type
- Service Quantity Identifier
- Time of Use
- Unit of Measure



PRO

- Easier to Maintain Online
- Combined User Interface



CON

- Conversion Challenges
- Multiple Unique IDs
- Difficult to Maintain Behind Scenes





Service Point: 389 Church Street, San Francisco, CA, 94111 / Electric Residential / Read Cycle 0...

Add

Main

Log

Service Point

Main ⓘ

INFORMATION	389 Church Street, San Francisco, CA, 94111 / Electric Residential / Read Cycle 01, Route 100 / Active ▼
SERVICE POINT TYPE	Electric Residential
STATUS	Active
ADDRESS	389 Church Street, San Francisco, CA, 94111, USA
TIME ZONE	US Pacific Time
SOURCE STATUS	Connected
PREMISE	389 Church Street, San Francisco, CA, 94111 ▼
GEOGRAPHIC LATITUDE	0.000000
GEOGRAPHIC	0.000000

Record Action

Edit

Record Information ⓘ

SERVICE POINT ID	992507548375
CCB SERVICE POINT ID	6800401571
ASSET LOCATION ID	992507548375
BUSINESS OBJECT	Service Point - MDM ▼
STATUS DATE/TIME	04-19-2017 20:12:56
CREATE DATE/TIME	04-19-2017 20:12:56

Service Points Records Stored in Application Specific Tables





The OBJECTS



Options for Meters & Characteristics



PRO

- More Functionality
- More Rounded



CON

- Terminology
- Configuration Maintenance
- Design Decisions
- Functionality Differences Across Modules

Billing Items Scenario

- All items maintained in C2M as a device.
- Rate engine checks if item type is configured when it bills item.
- Whenever you update device type, system updates the item type table.
- If create device types using SQL, need to update item type table.



PRIZE 3!!!

The Gameboard



The
PIVOTS



The
OBJECTS



The
DATA



The
SYNC

There are OOB syncs for all objects that need to be converted from CCB to MDM, ODM, and SOM.



The Gameboard



The
PIVOTS



The
OBJECTS



The
DATA



The
SYNC

FALSE





The DATA



Source System



CCB Person → *MDM Contact*
CCB SP → *MDM SP*
CCB SA → *MDM US*

CCB Person → *ODM Contact*
CCB SP → *ODM Location*

C2M



Destination Systems





Recommend leveraging the initial sync objects combined with bits and pieces of the new objects to create a complete initial sync process.

Meter Sync

- Replaced Outbound Message creation logic with logic modeled from SP sync.
- Created two versions, one for CCB to MDM and one for CCB to ODM.
- MDM has sync processes dependent on the Devices being in place.
- Takes longer to create the configuration for ODM.

Item Sync

- Modeled after Meter sync request processes.
- Created two versions, one for CCB to MDM and one for CCB to ODM.
- Some Items can only go in MDM or ODM.

Meter Config, SP/Meter History, & Meter Read Sync

- Replaced Outbound Message creation logic with new, internal, table-to-table logic.





- Since there is no SOA integration, there are **no DVMs**.
- ODM needs to have an **“Out of Service” location** configured before Items/Meters are synchronized as Assets, and they all need to default to that location. The location will change later when Install Events are synchronized.
- C2M does not use the old CCB tables for Operation Area, Meter, Item, Meter Read, etc. But the SP Maintenance Object is **still connected to them and still validates** everything connected to an SP record.
- There are also columns on the Service Point table that are no longer used that **will cause errors** if they are populated in C2M.
- Some sync processes **reference the framework** Sync Request tables when validating foreign keys – so it’s not a good idea to clear those tables until everything has been converted.



PRIZE 4 !!!

The Gameboard



The
PIVOTS



The
OBJECTS



The
DATA



The
SYNC

With the integration layer being removed from C2M, there are no longer on-going syncs you need to maintain between the products.



The Gameboard



The
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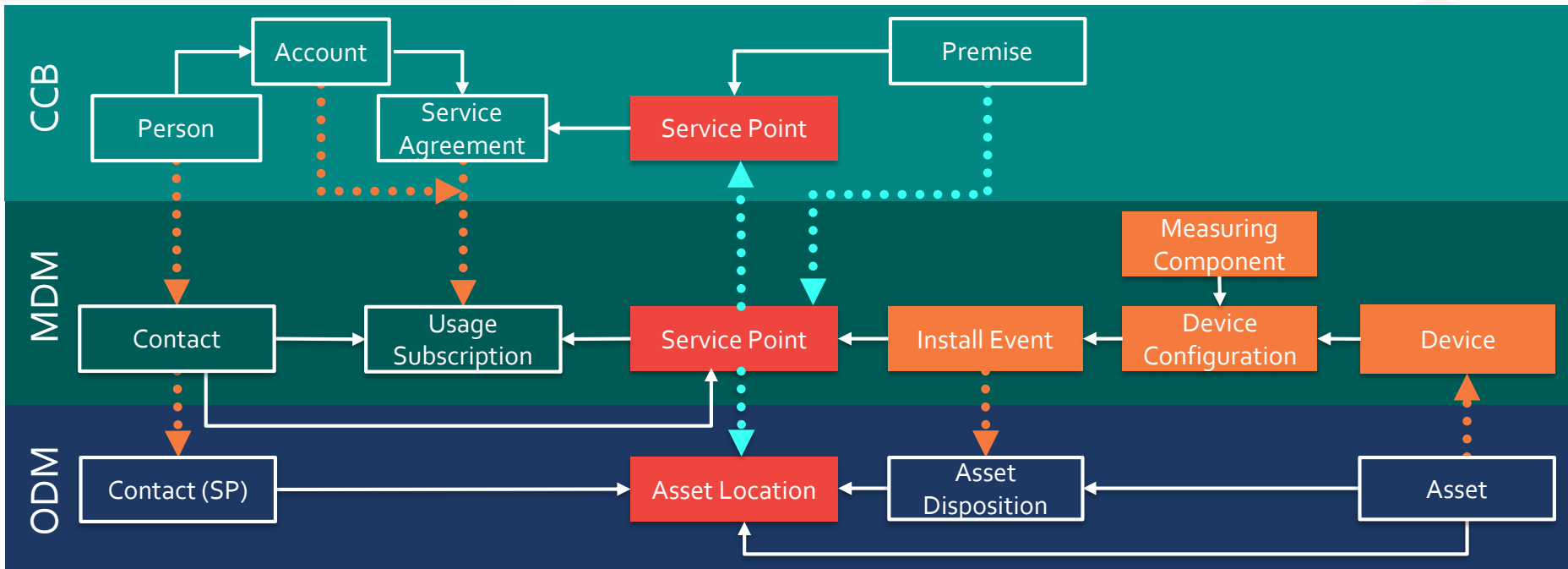
The
DATA



The
SYNC

FALSE





What we Learned



- Terminology
- Get Visuals Early
- Set the Foundation

- Work Closely with Oracle
- Data Model is More Complex



What's Next for ALLETE



Learn More
About
Customers &
Our Data



More
Actionable
Data



Provide More
Programs &
Services



Optimize
Business
Processes



Contact Us

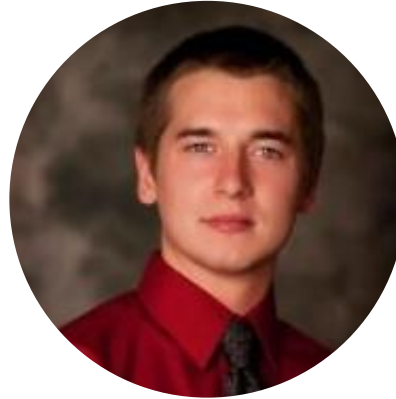


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