

Improving Time-to-market and Data Quality in the Insurance Industry

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Chief Application Architect



Agenda

- Who is Unitrin?
- Industry Context and Unitrin Strategy
- Initial Projects
 - Streamlining new business
 - Improving customer experience
- Lessons Learned and Best Practices

About Unitrin

- **\$3 billion financial services company**

- **Unitrin Property & Casualty Insurance**

The Property and Casualty Insurance Group is made up of Kemper and Unitrin Specialty, which sell personal lines and commercial auto insurance through a network of independent agents; and Unitrin Direct, which sells personal auto and homeowners insurance directly to consumers. This group represents 73% of Unitrin's \$2.5 billion of annual insurance premiums.

- **Unitrin Life & Health Insurance**

Unitrin's Life and Health Insurance Group offers life, health, and accident insurance to customers through a national network of 2,400 company-employed career agents and 230 independent agents.

- **Automobile Finance**

Fireside Bank is one of the oldest and most highly regarded automobile finance companies of its kind. It specializes in assisting individuals with marginal credit histories to purchase pre-owned or new automobiles that provide vital transportation to their places of employment.

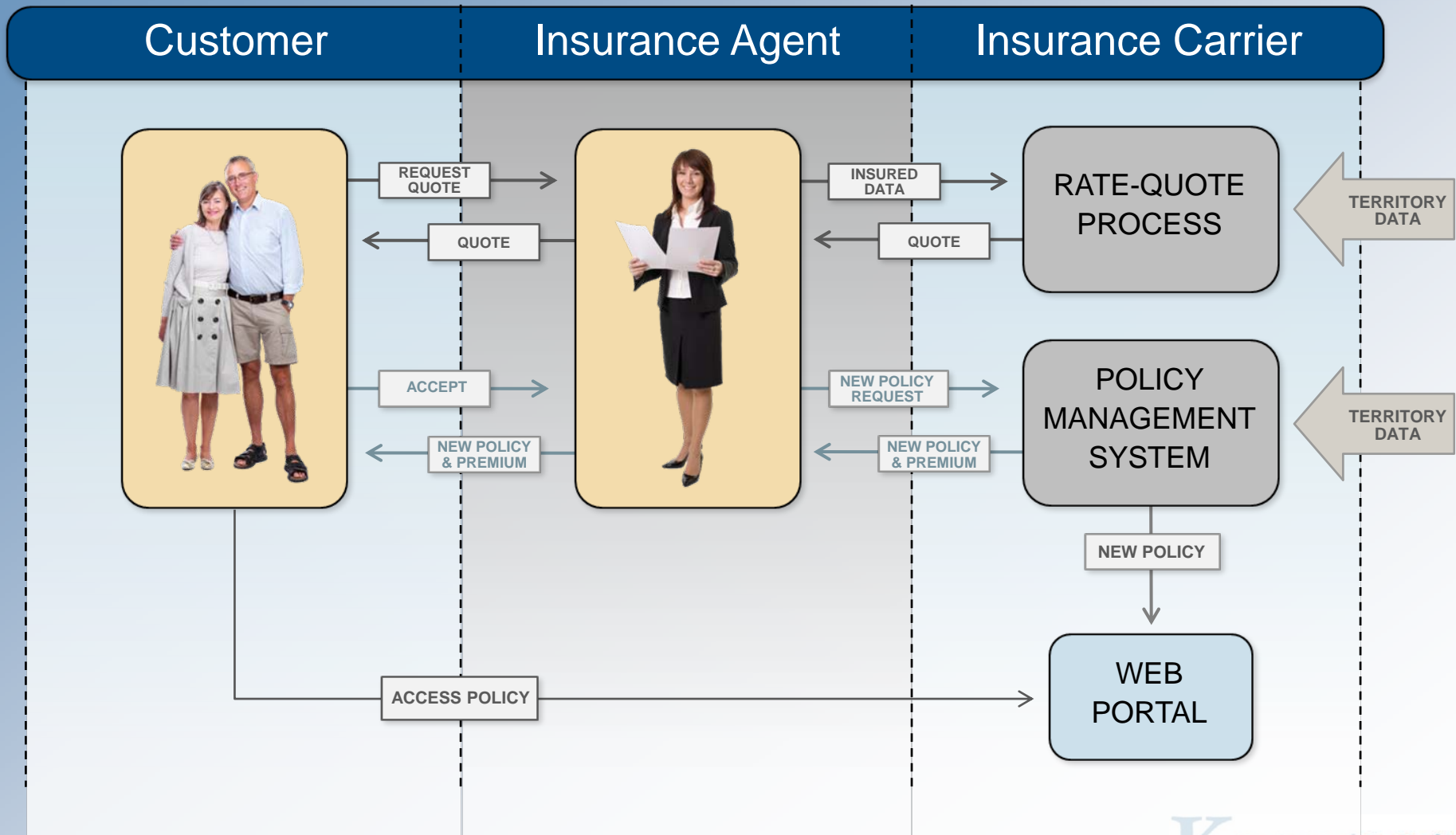
* Unitrin uses the registered trademark "Kemper" under license, for personal lines insurance only, from Lumbermen's Mutual Casualty Company, which is not affiliated with Unitrin

Unitrin Property and Casualty Insurance

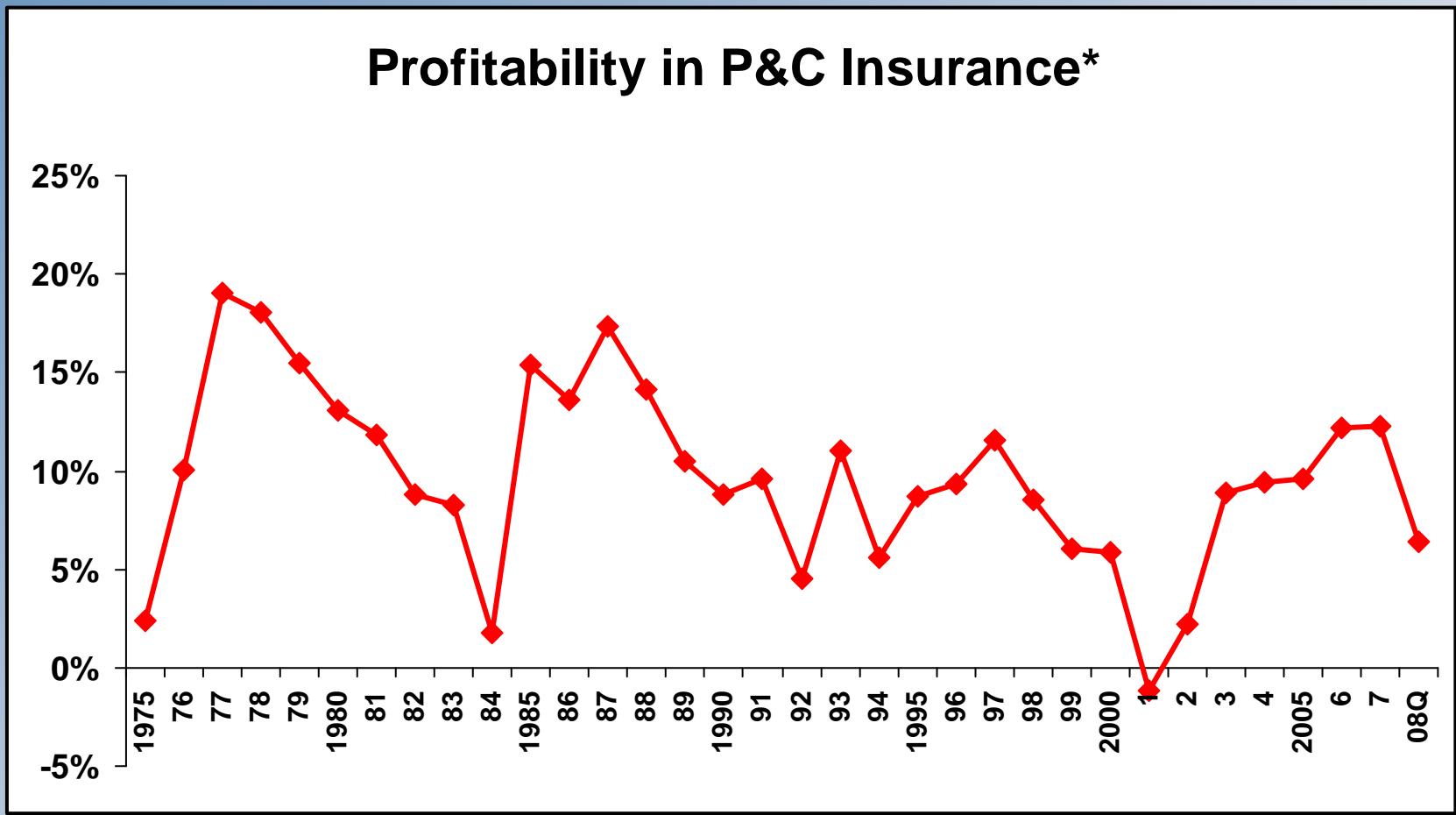
- **Kemper®***
Provides personal automobile, homeowners, inland marine, boat owners, dwelling fire and personal umbrella insurance to preferred and standard-risk customers
- **Unitrin Specialty**
Provides personal and commercial, nonstandard automobile insurance to individuals and businesses through more than 7,500 independent agents/brokers in 22 states
- **Unitrin Direct**
Markets auto insurance primarily through direct mail, Web insurance portals, “click- throughs,” its own Web site and television advertising

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How our Business Works



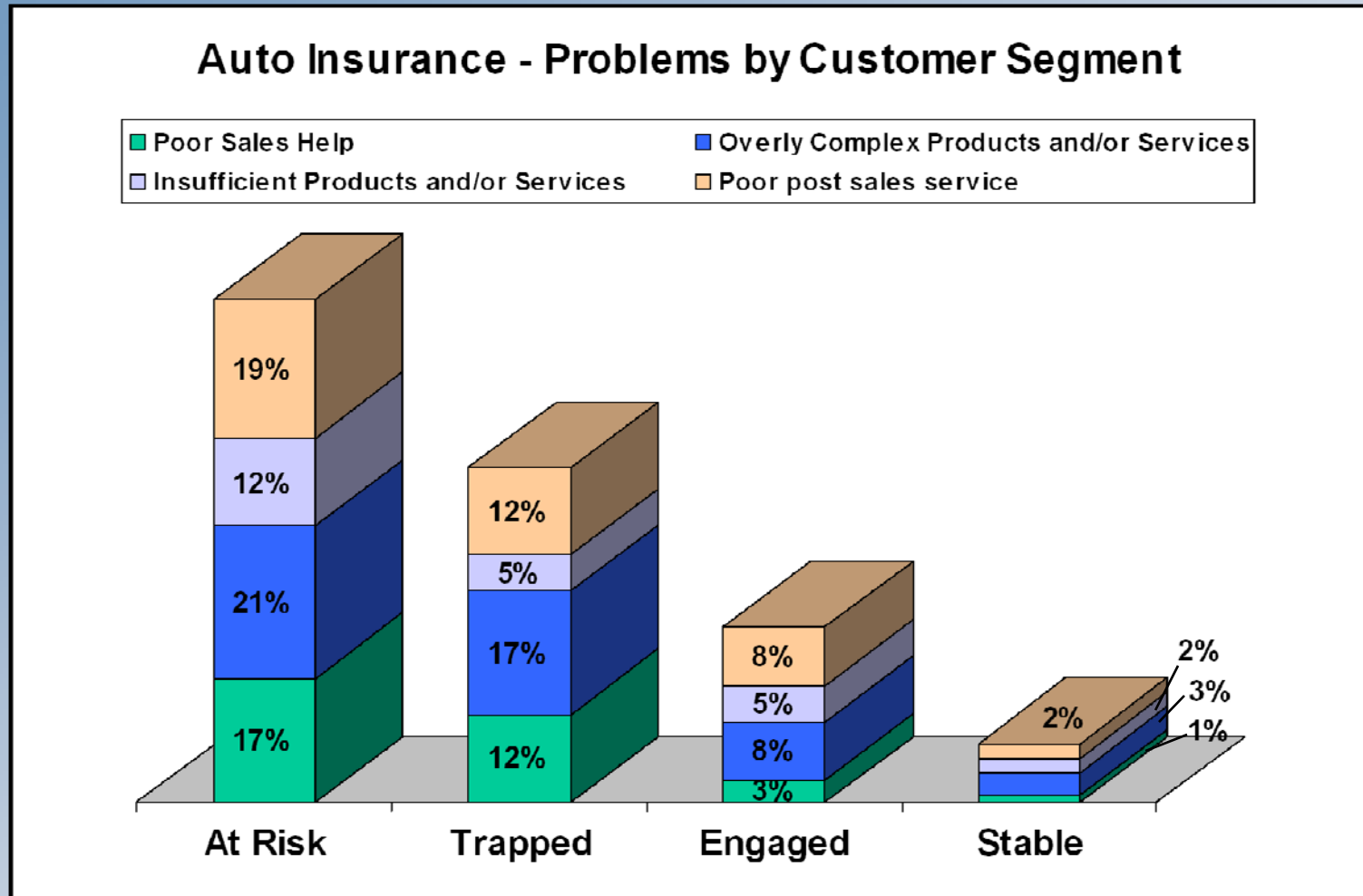
Industry Challenge: Competition & Profitability



* GAAP ROE for all years except 2007

Source: Insurance Information Institute, ISO, Fortune

Industry Challenge: Demographic Change



Forrester Research, Inc. November 2007

Unitrin Competitive Strategies

1. Streamline distribution channel (agency service)
2. Introduce new innovative products
3. Improve customer service
4. Acquire new firms to increase share

IT Challenges in Supporting the Business Strategy

Business Strategy	IT Challenge
1. Streamline distribution channel (agency service)	1. Inaccurate data in the rating and underwriting process
2. Introduce new innovative products	2. Hard to customize mainframe policy management system
3. Improve customer service	3. No real-time distribution of policy events: new policies, policy updates, etc
4. Acquire new firms to increase share	4. No common infrastructure, no reuse, lack of standards

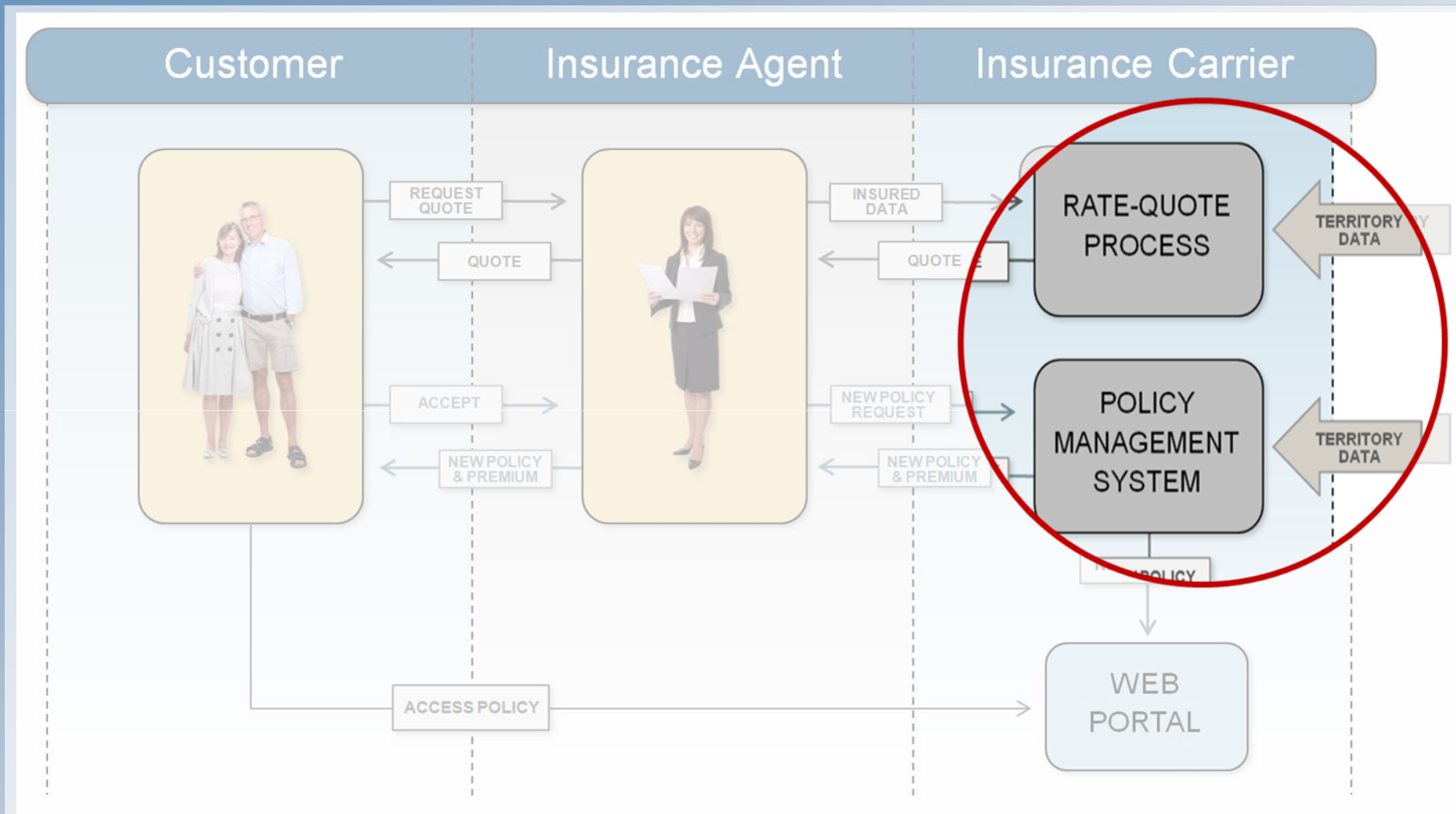
Key Technology Requirements

- JMS and Web Service clients to be serviced
- Scalable infrastructure that can grow with us
- Interoperable with .Net and Java
- Connectivity to legacy MOM and databases
- Scriptable deployment model
- Preferred Eclipse tool support
- Support for COBOL Copybook
- Support for ACORD P&C 1.11 Standard

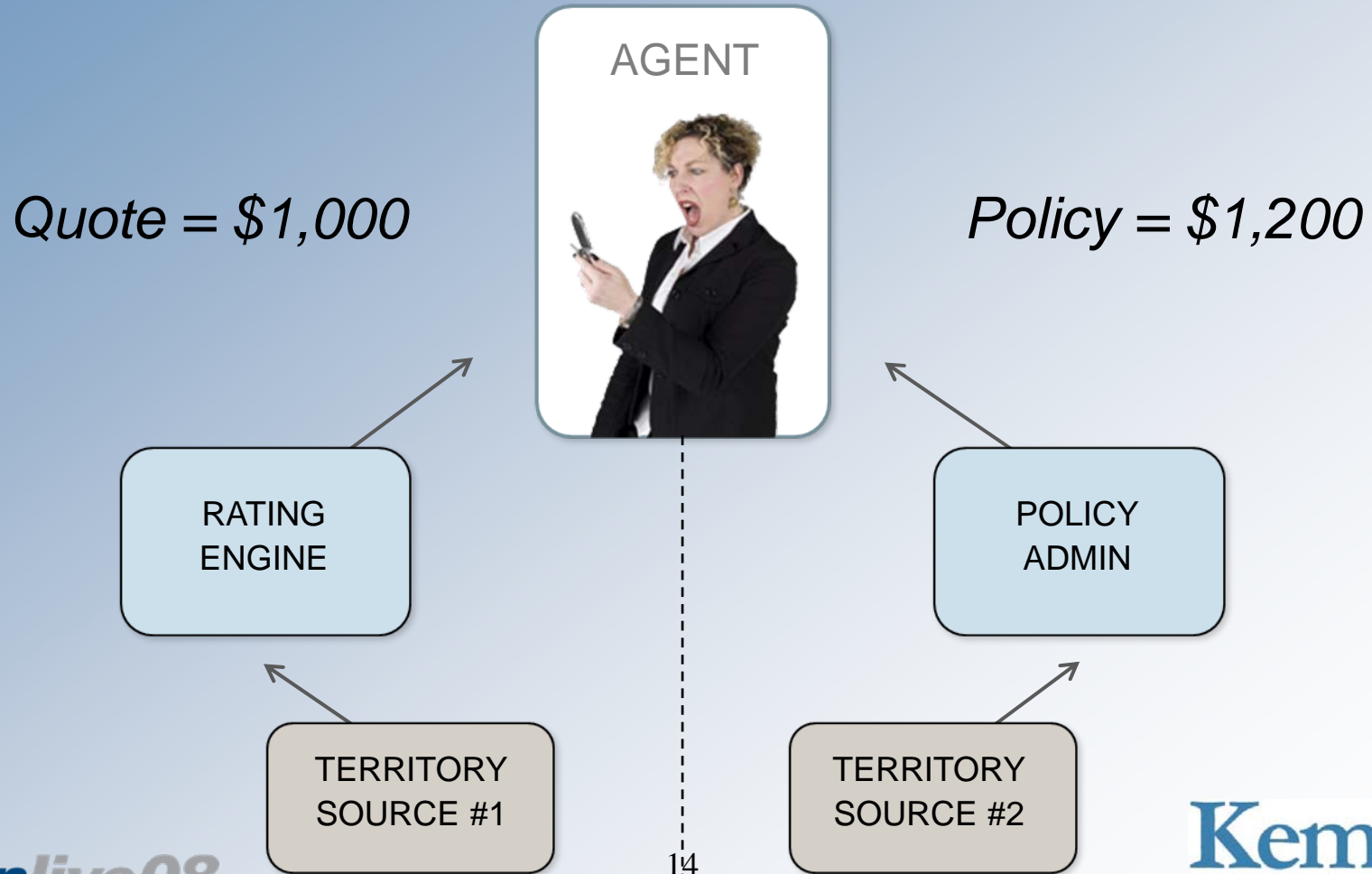
Addressing IT Challenges with Progress SOA Products

- SOA enables modularity, re-use, and standards based application integration
 - Sonic ESB: Event-driven messaging between multi-vendor ESBs and back-office applications
 - DataXtend Semantic Integrator: ACORD-based data interoperability between multiple application specific formats

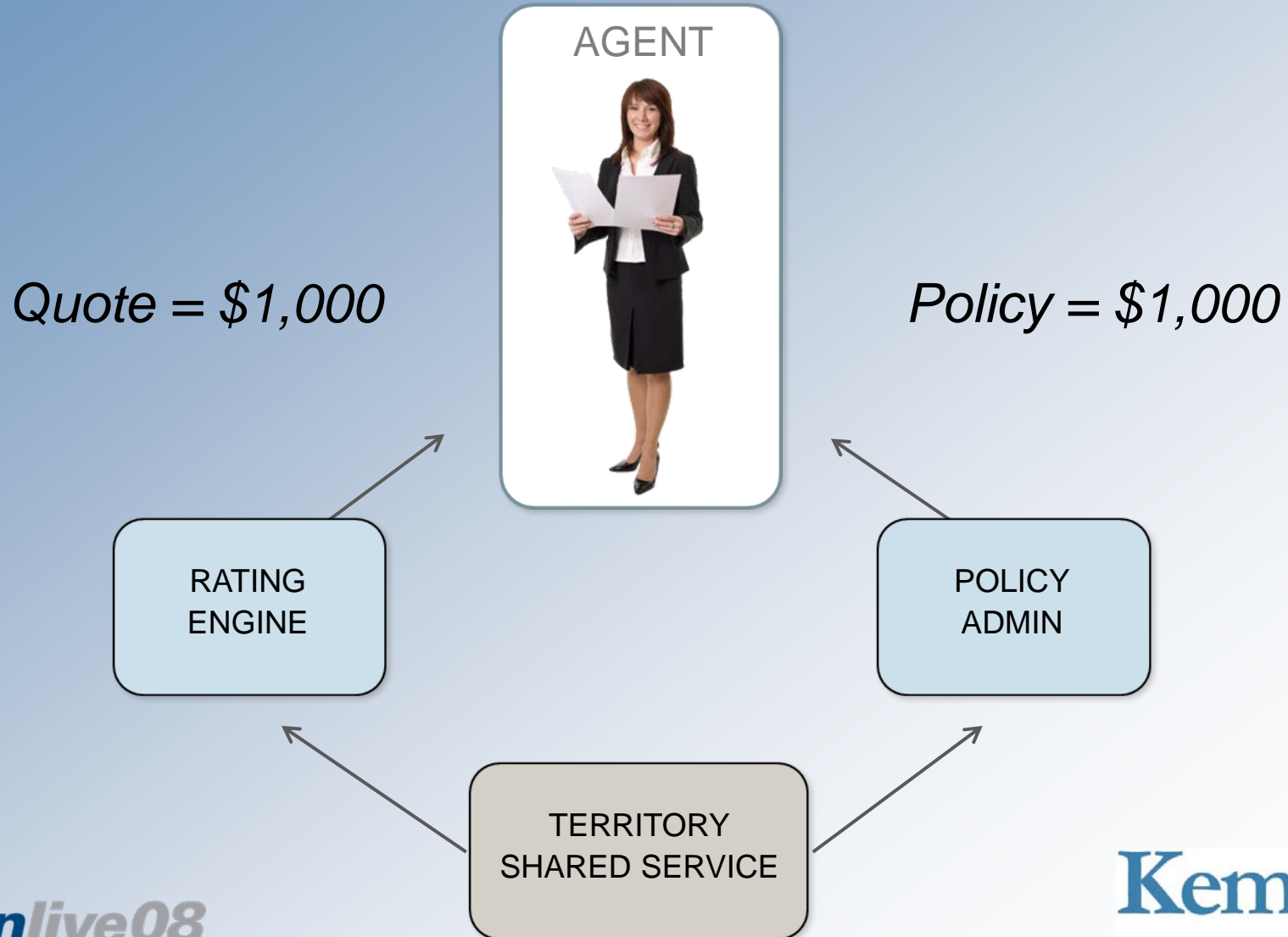
Where the Problems Are



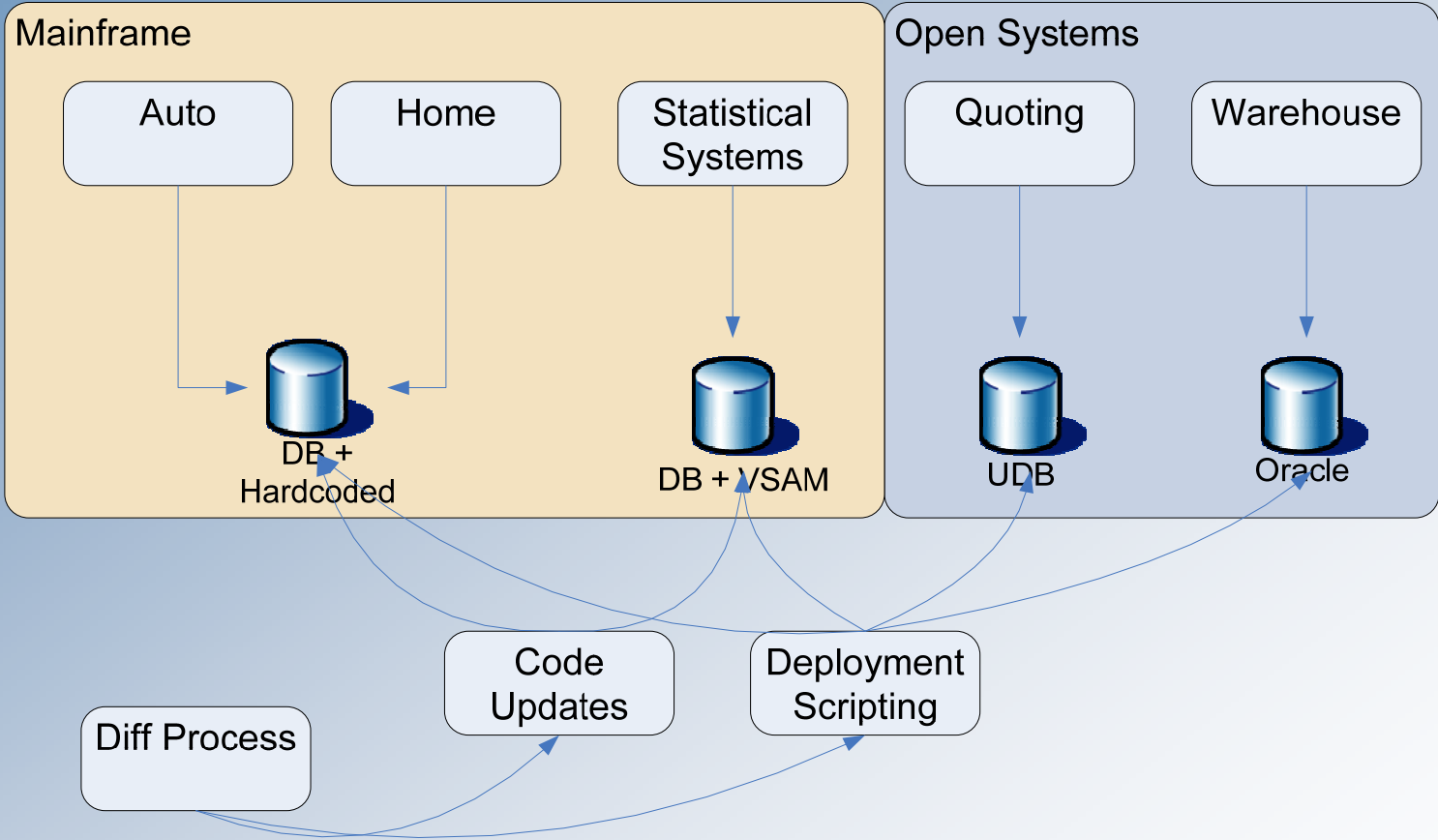
Distinct Sources of Territory Information used for Quote and Premium Computations



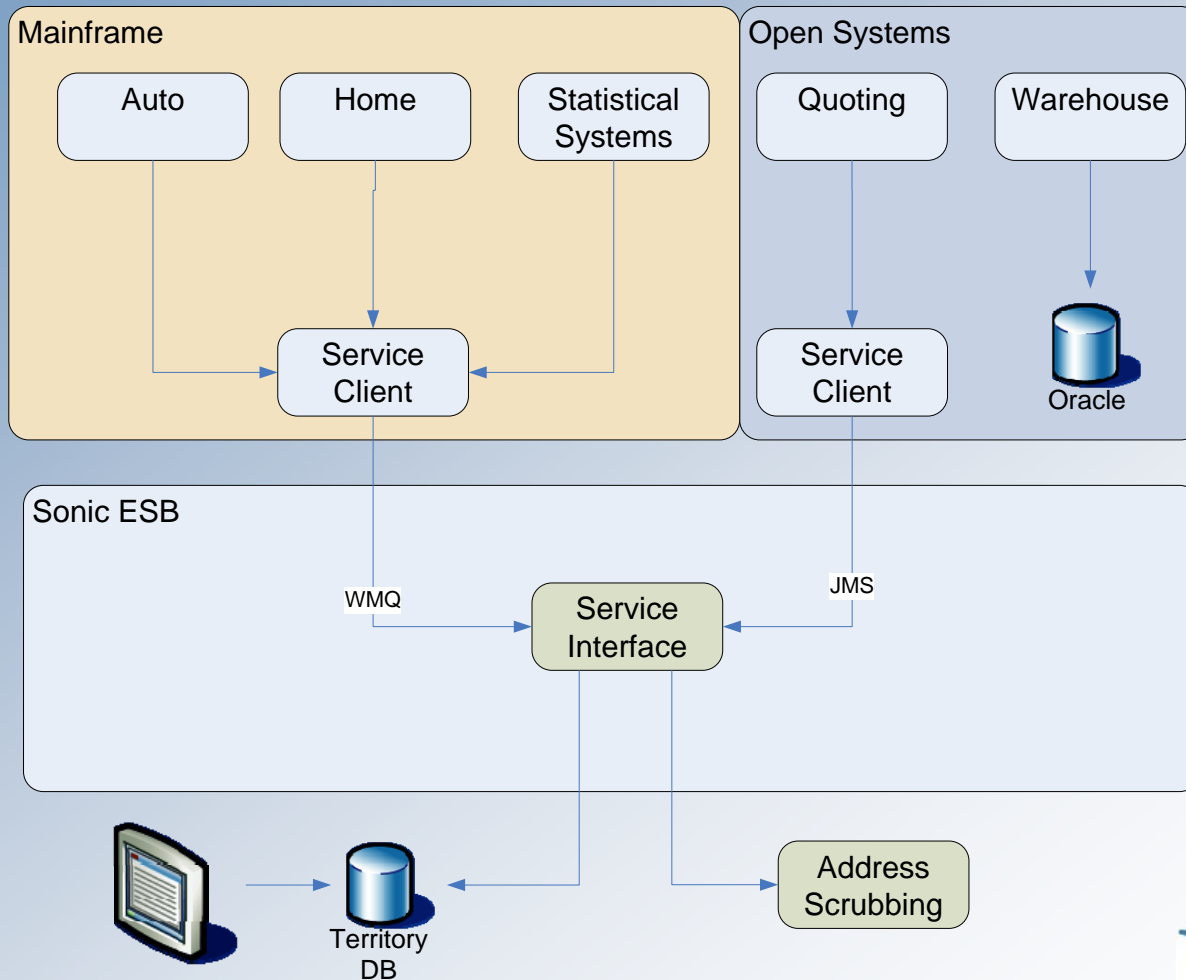
Distinct Sources of Territory Information used for Quote and Premium Computations



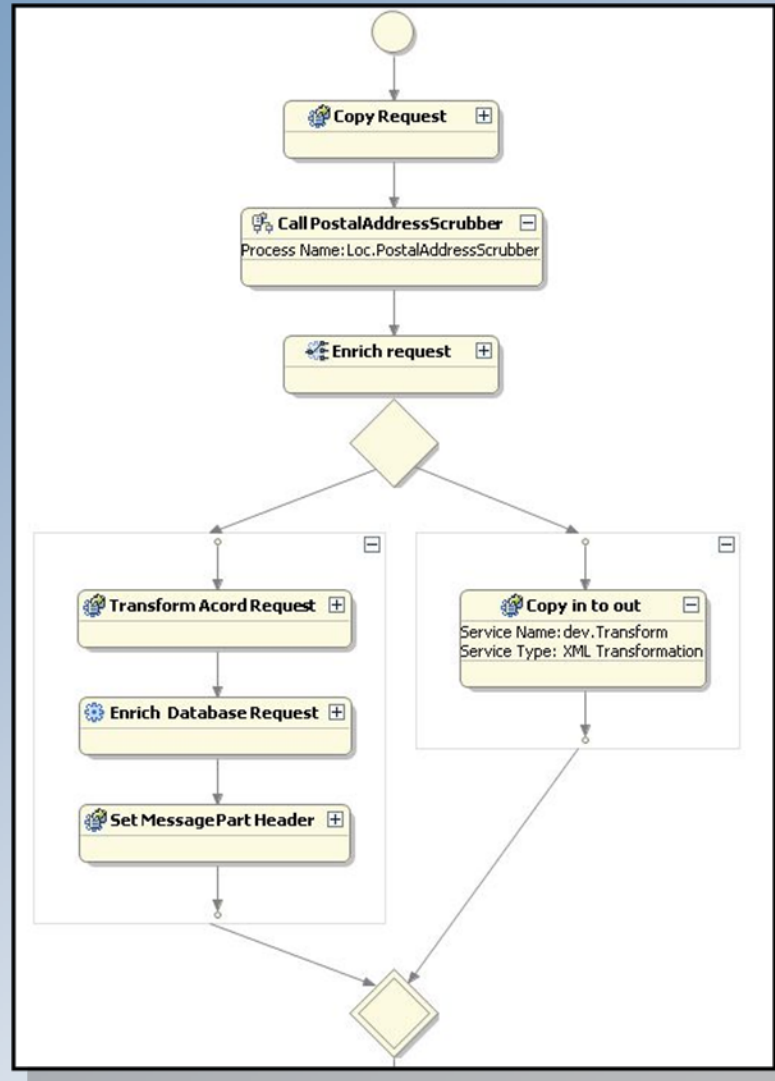
Prior Architecture



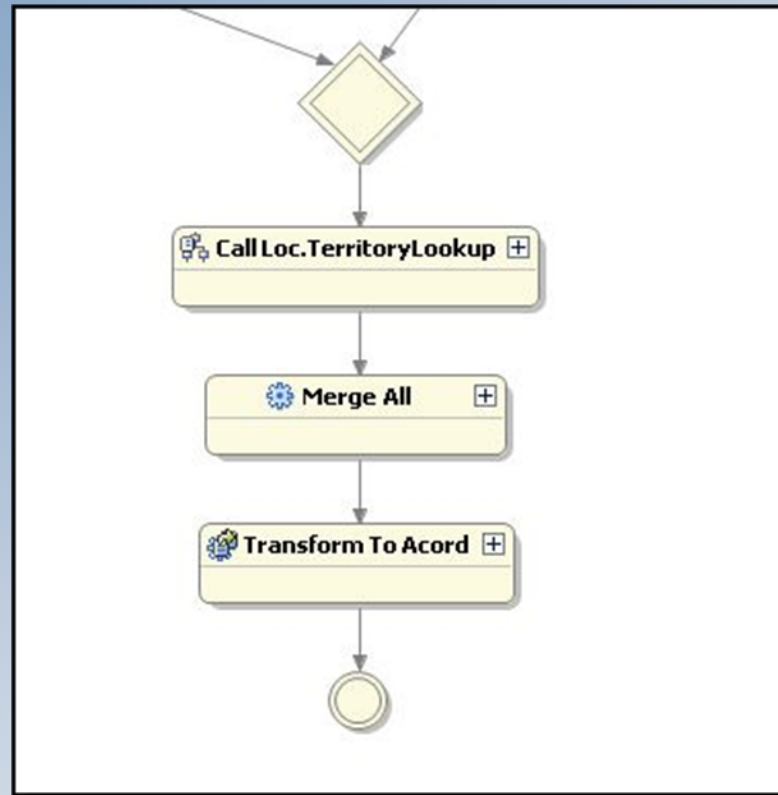
Current Architecture



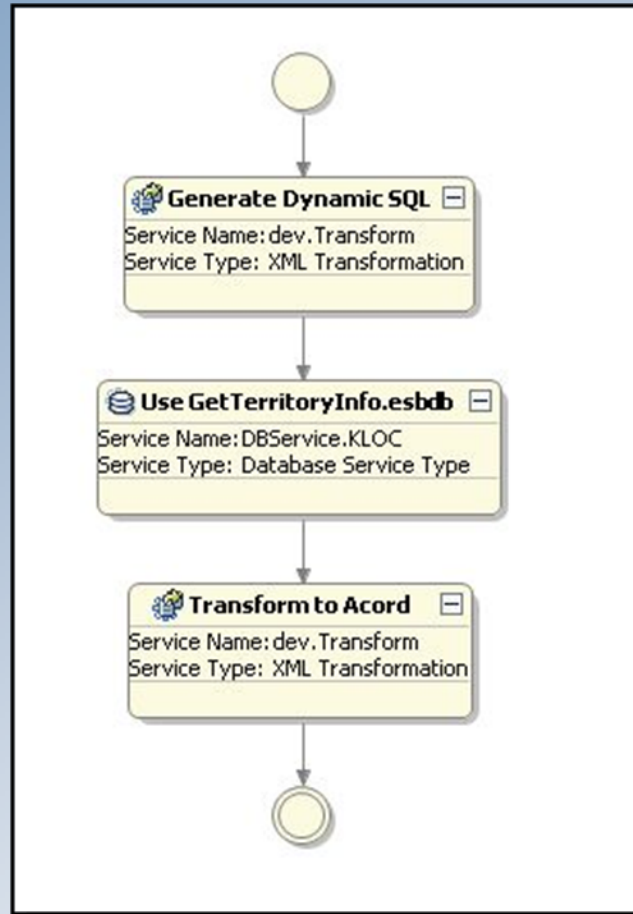
Address Scrub and Territory Lookup Process



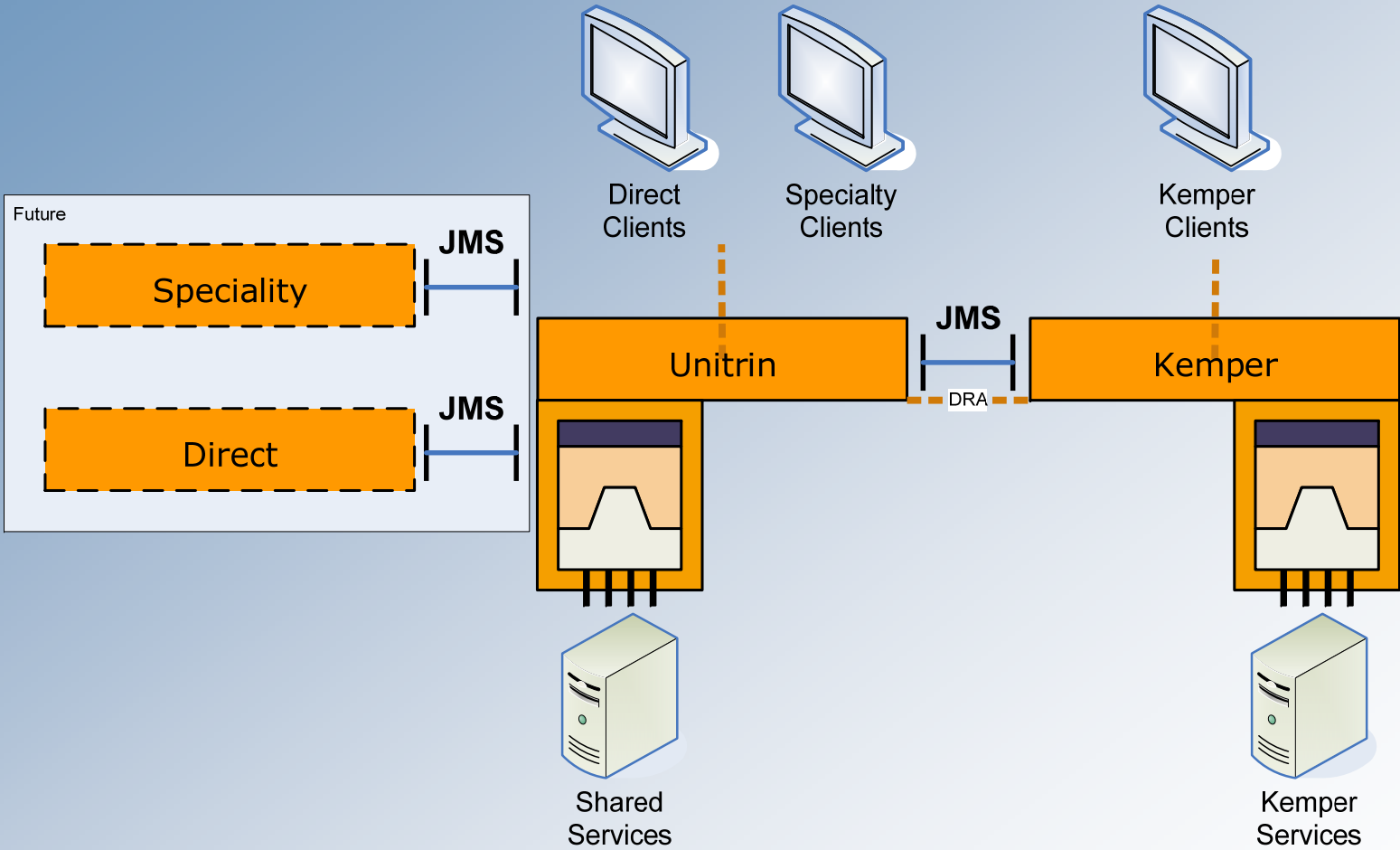
Address Scrub and Territory Lookup Process



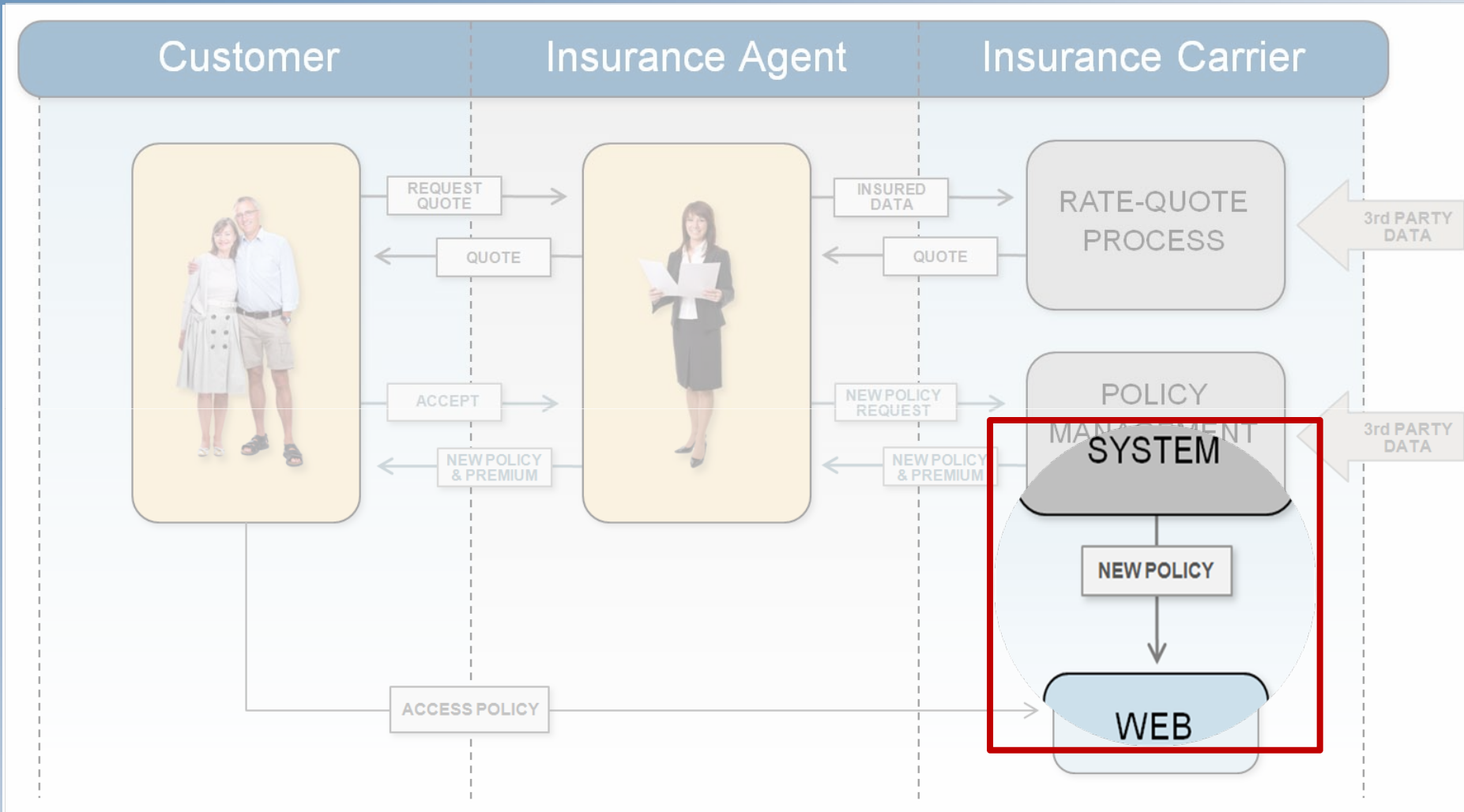
Territory Lookup Sub-Process



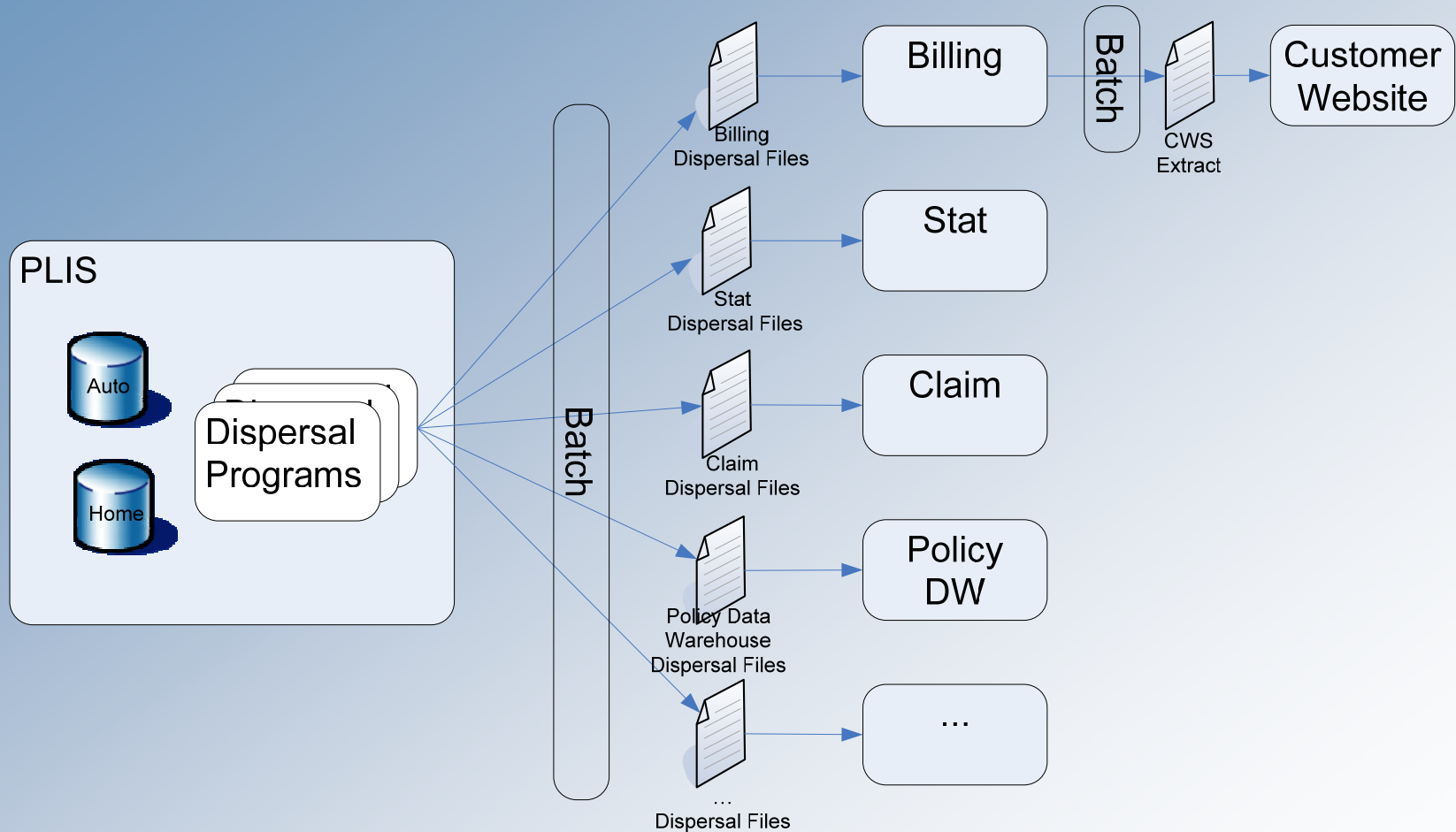
Deployment Architecture for Shared Services



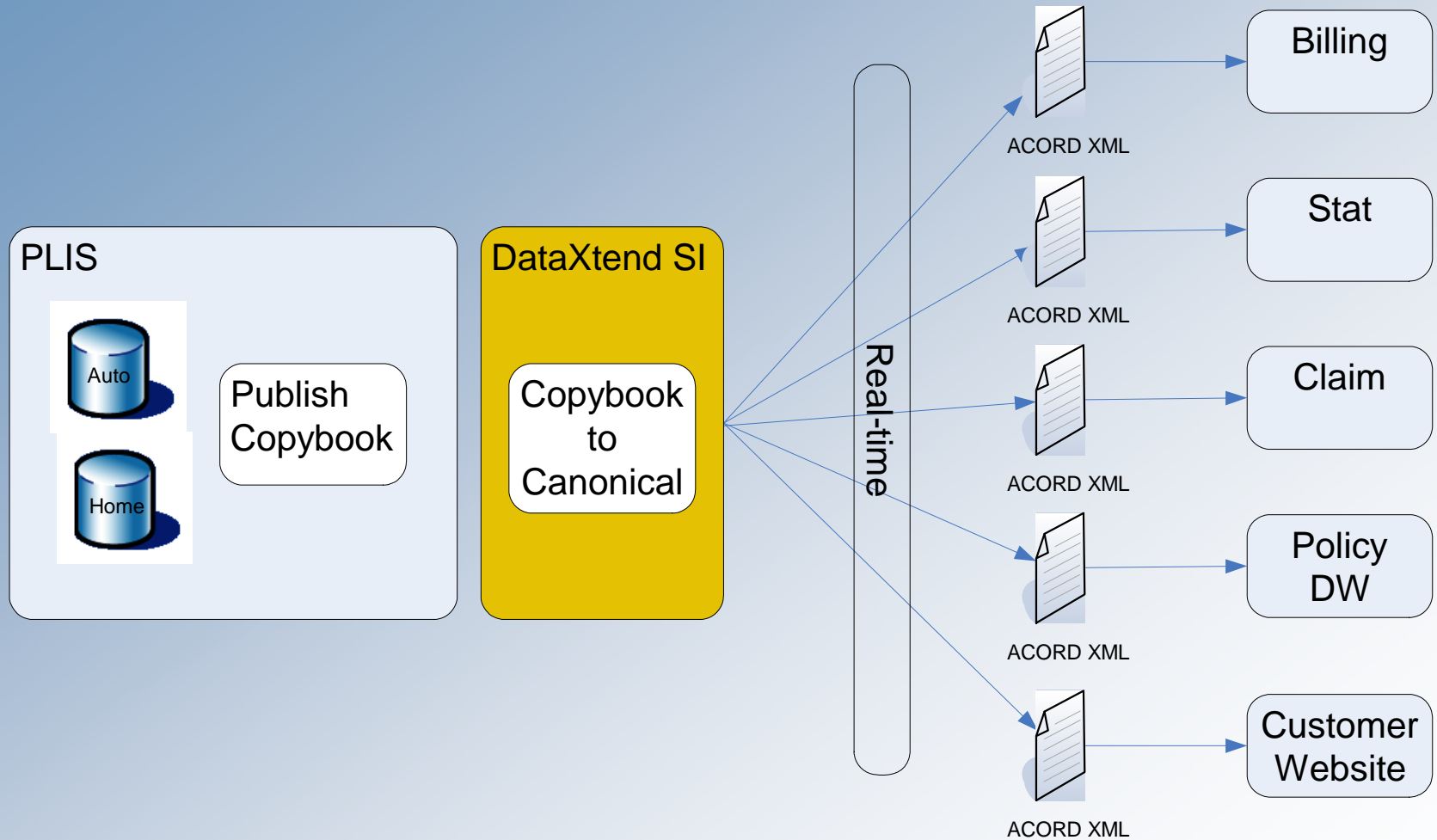
Where the Problems Are



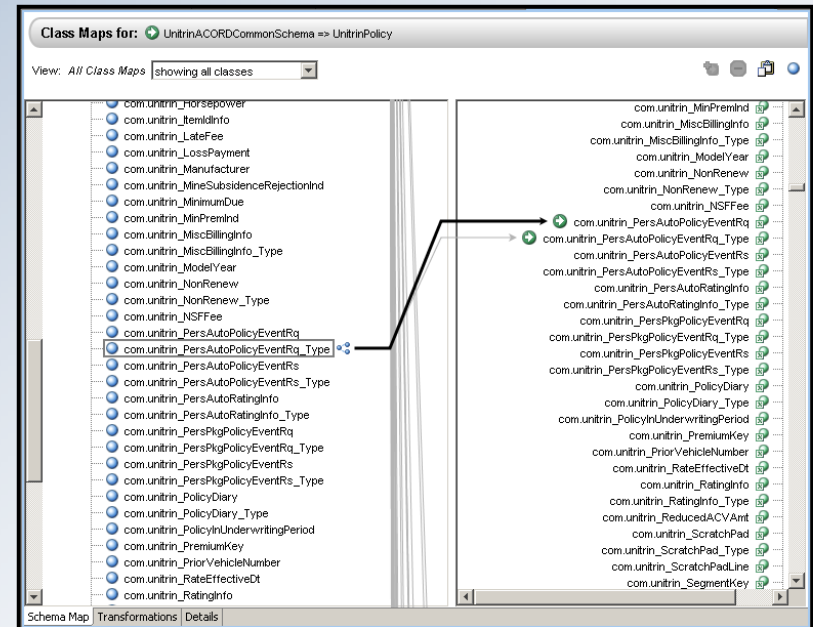
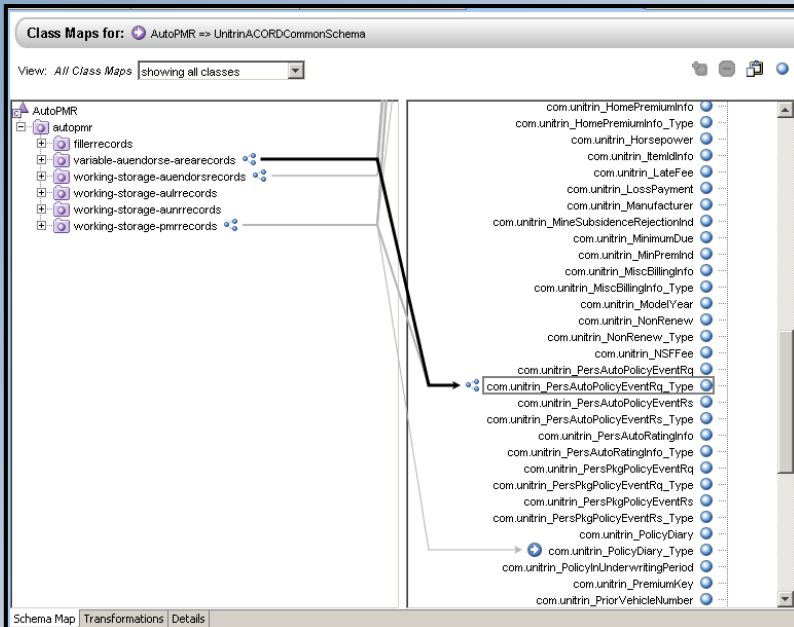
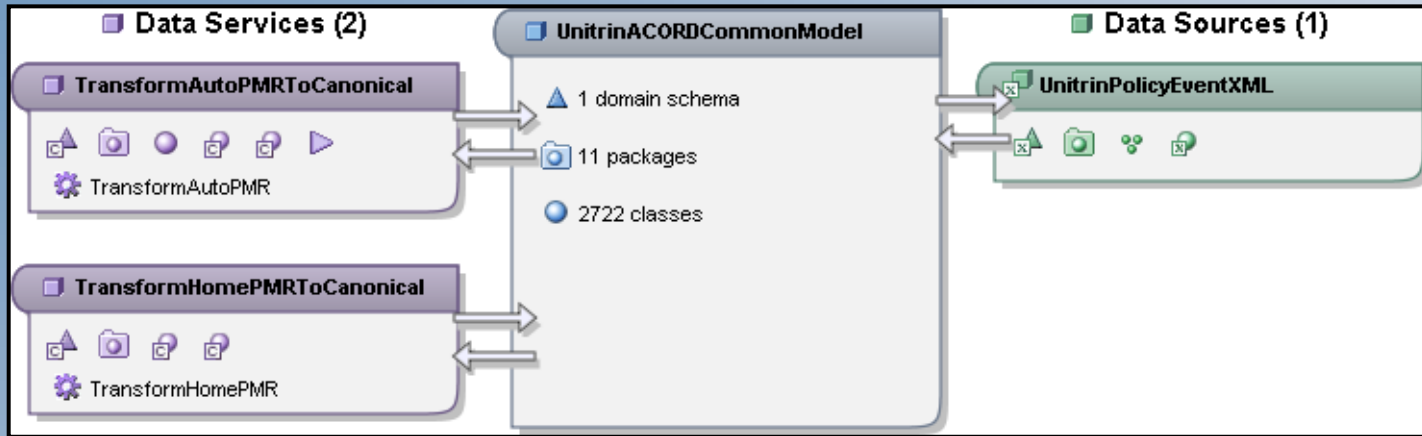
Multiple Versions of Policy Dispersal Files in COBOL Copybook




DXSI Takes “Policy Event” and Publishes as XML



Data Exchange Through Unitrin Common Model



Impact Analysis and End-to-End Testing is Possible with Exchange Model

Impact Analysis Report 

Unitrin project
Date: Wed, 3 Sep 2008 18:31:35

Subjects	
Type	Name
XML complex type	com.unitrin_PersAutoPolicyEventRq:xml:UnitrinPolicy
class	com.unitrin_PersAutoPolicyEventRq_Type:UnitrinExtensions:UnitrinACORDCommon

Type Affected

938	Classes
1	COBOL Enumeration Type
12	COBOL Fields
40	COBOL Group Types
13	COBOL Relationship Attributes
19	Computed Attributes
1	Data Service Operation
1	Key
8	Packages
55	Relationship Attributes
2	Relationships
6	Simple Attributes
103	Transformations
938	XML Complex Types
1	XML Data Source
5	XML Simple Attributes

Impact Analysis Details

Steps	Type Affected	
1	Class	com.un...

Select step: 24. return result (TransformAutoPMRToCanonical) (end)

TransformAutoPMRToCanonical

- Entities
 - WORKING-STORAGE-AUENDORS (5426)
 - WORKING-STORAGE-PMR (1)
 - WS-ACCDT-SEGMENTS (4080)
 - WS-AUCOV-SEGMENTS (1714)
 - WS-AUPREM-SEGMENTS (2916)
 - WS-AUUND-SEGMENT (5264)
 - WS-CNWTN-SEGMENTS (4152)
 - WS-CU-SEGMENTS (5276)
 - WS-DIARY-SEGMENTS (3734)
 - WS-DISP-KEY-SEGMENTS (5334)
 - WS-ID-SEGMENT (4)
 - WS-LIEN-SEGMENTS (5246)
 - WS-MISC-SEGMENTS (39)
 - WS-OPR-SEGMENTS (4036)
 - WS-REC-ID-ID (2)
 - WS-SOIP-SEGMENTS (4224)
 - WS-SPAD-SEGMENTS (5308)
 - WS-VEH-SEGMENTS (462)

UnitrinACORDCommonModel

- Entities
 - ACORD (6833)
 - TransformAutoPMRToCanonicalContext (6832)
 - RuntimeReport (7064)

Data Sources

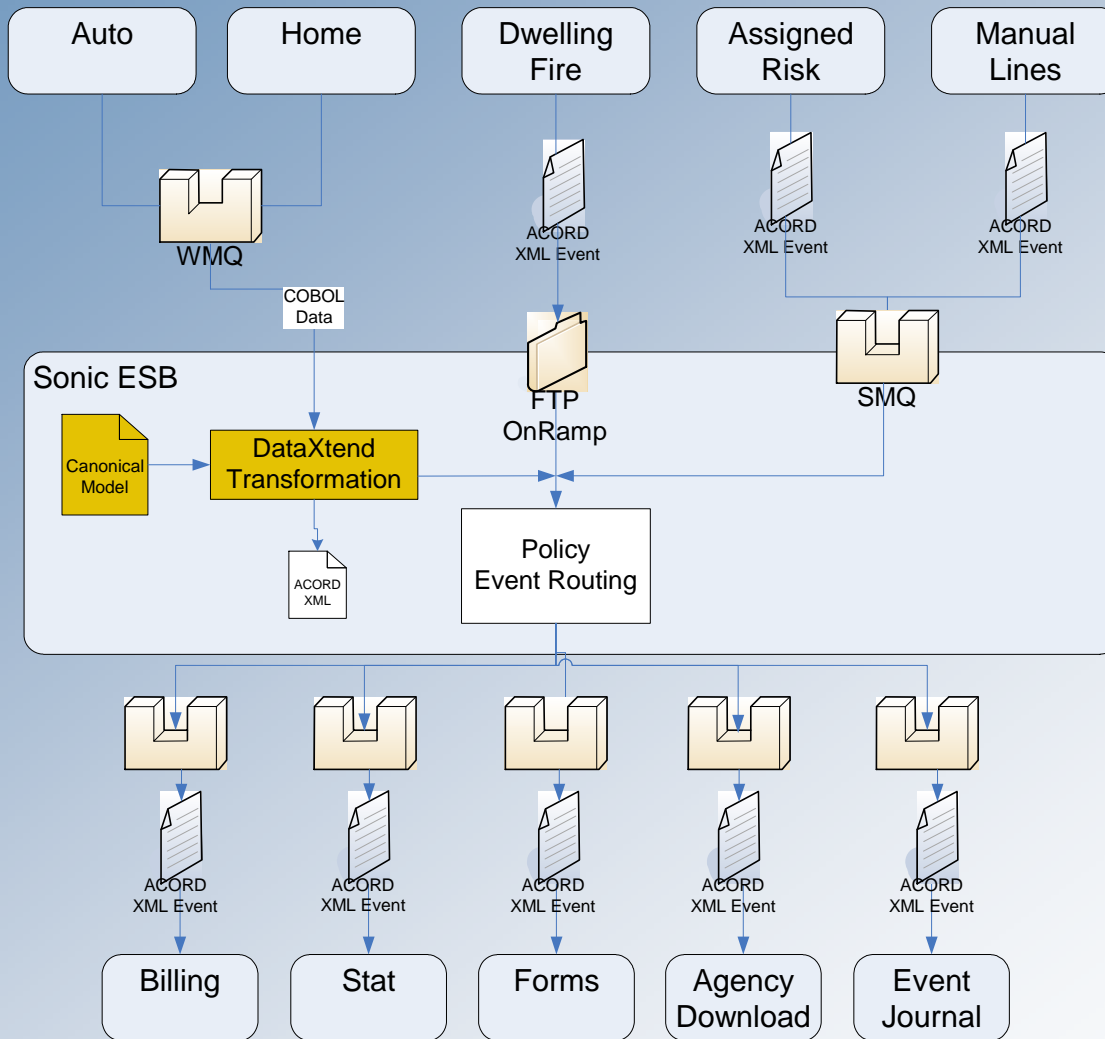
- UnitrinPolicyEventXML
 - Entities
 - ACORD (6977)
 - ACORD = ACORD_Type (6978)

XML

```
<?xml version="1.0" encoding="UTF-8"?>
<ns:ACORD xmlns:ns="http://www.unitrin.com/ACORD1.11.0/Policy_1.0/xml">
  <ns:SignonRq>
    <ns:ClientDt>2008-08-20</ns:ClientDt>
    <ns:CustLangPref>EN</ns:CustLangPref>
    <ns:ClientApp>
      <ns:Name>PLIS</ns:Name>
    </ns:ClientApp>
  </ns:SignonRq>
  <ns:InsuranceSvcRq>
    <ns:com.unitrin_PersAutoPolicyEventRq>
      <ns:RqUID>c9ad651e-9bed-4d54-a1ca-5d141b238d04</ns:RqUID>
      <ns:TransactionRequestDt xsi:nil="true"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
      <ns:TransactionEffectiveDt xsi:nil="true"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
    </ns:com.unitrin_PersAutoPolicyEventRq>
  </ns:InsuranceSvcRq>
</ns:ACORD>
```

OK

Deployment Architecture for Policy Distribution



Why Unitrin Chose Progress

- Quick infrastructure deployment
- Scalable Licensing allows growth without drastic cost increase
- Services can be deployed quickly with rich integration options
- Service hosting reduces the number of application server JVMs needed
- Federation allows admins to decide what is shared
- Exchange modeling enabled full impact analysis across systems
- Reverse mapping feature cuts time to implement mappings
- DXSI able to load and manipulate
 - Entire ACORD XML P&C Model
 - Unitrin Cobol Copybooks

Best Practices and Recommendations

SOA - IT Best Practices

- Start from model of IT services that align with terms used by business partners
- Identify/Prioritize services that will bring the most lift to the organization
- Create a governance structure that ensures consistency across services
- Even if the project is purely "technical", use business analyst to root out the corner cases

ESB Best Practices

- Get scripting for service/process deployment done early and create a repeatable process
- Isolate newer services in their own ESB containers so that resource utilization can be monitored closely
- Create standard process for fault handling
- Isolate On-Ramp processes from service implementation

Lesson Learned

- Very important to get the JumpStart
 - Ensure proper hardware sizing and configuration
 - Fill in areas where online training may have missed
 - Provide best practices / patterns / anti-patterns
- Be sure to plan enough time for the integration of the clients to the services being deployed on the bus
- Centralized service development team is a good idea early in the ESB deployment cycle
- Get buy-in and project sponsorship from CIO level of the organization
- Work with business partners to help them understand the benefits of SOA and by extension the ESB

Future Plans

- Continue working through the conceptual model and fulfill the service definitions that have been identified
- Implement business logic for receiving applications for Policy Event data
- Design and implement Claim Event Routing
- Explore additional integration technologies for our Legacy applications
- Leverage the canonical model provided by DataXtend for additional Policy Services

Questions



Thank You

PROGRESS
S O F T W A R E

Progress.
psdnlive08

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Kemper
A UNITRIN BUSINESS

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