

# CANON MODEL FORUM

Nationwide – SOA Solutions  
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- The company provides a full range of personalized insurance and financial services, including car insurance, motorcycle, boat, homeowners, life insurance, farm, commercial insurance, administrative services, annuities, mortgages, mutual funds, pensions, long-term savings plans and health and productivity services. For more information, visit [www.nationwide.com](http://www.nationwide.com).
- #105 in the Fortune 500
- 36,000 employees
- \$135 billion in statutory assets

# SOA SOLUTIONS



- Mixture of web-services, queue-based services, REST
- More than 100 Service-operations
- Policy Management, Customer Management, Billing, GIS, Underwriting Rules
- Goal state is to model all services from a single “canonical” reference Model
- External facing services modeled according to industry standard formats such as ACORD and ANSI X12. In some cases proprietary formats of the provider have been used.

# GUIDING PRINCIPLES



- Information and Data Architecture Guiding Principles directly aligned to the use of a canonical model.
  - We create and use a common business vocabulary
  - We create and maintain “one version of the truth”
  - Information is sharable
  - Data and information are of the highest quality

# IMPLICATIONS OF THE OF USING A CANONICAL MODEL



- Business information must be represented consistently across implementations
- Architects
  - Create and support a unified information and data model for enterprise usage
- Designers
  - Wherever possible, design data structures from an enterprise data model

# IMPLEMENTING A CANONICAL FOR SOA



- Architectural Decision at the beginning of the SOA effort
  - Use IBM's Insurance Application Architecture (IAA) as the reference model for XML messaging
    - Services are in the context of a reference model that relates existing and potential services to an insurance business model.
    - Loose coupling
    - IAA was already in use for other applications
- IAA Interface Design Model was the starting point for our canonical message format
- Customized the model to meet the requirements of SOA projects as they occurred
- Reference model now realized in an IgniteXML cabinet with complexTypes from across a wide range of services

# USE OF A CANONICAL MODEL HAS HELPED US ACHIEVE...



- Re-use in interface design
  - After completion of modeling for the first generation of Customer Management and Billing services, we had covered most of the model that we use across all services. The time to map a set of application data to the business model went from weeks down to hours.
- Interoperability
  - We've been able to implement a few composite services that pull together blocks of data from multiple atomic services

# How to Get Business Buy-In on your Canonical Model Strategy



## Management Buy-In

Why is it needed?

- Data Integrity- **the business goal: use data to drive decisions.**
  - After many transformations of data it is difficult to ascertain if the data sent is the data received.
  - Creating a consistent agreement between two or more applications for what the data MEANS and how it will be used.

## User Buy-In

Why Is it needed?

- Code/Knowledge Reuse.
  - Consumer Code Developers – Developer is using the same object from many different services. Binding mappings made easier.
  - ESB Developers – Transformation rules become easier. Reuse of enumeration property files.
  - Business Analyst – Business definitions are defined. Lack of ambiguous definitions. Less reliance on data experts. Mapping spreadsheets become obsolete.
  - Schema Developers – Knowledge of the model enhanced continuously.