API WG - Objectives

- Goal
  - To standardise the APIs created for XBRL by providing blueprints for them in the form of API signatures
- Benefits
  - Providing software developers with a familiar point of entry into XBRL
  - Serving as a useful learning tool for developers wishing to incorporate XBRL
  - Encouraging open source implementations of the API signatures
  - Enabling greater consistency across vendor tools and greater interoperability across vendor implementations of XBRL

API WG - Status

- Working Group formed in April 2012
- First task was to create survey to canvas input from broad XBRL community. Survey released in September and covered areas including:
  - Background information such as operating jurisdictions, XBRL specifications used etc
  - How XBRL is being used (taxonomy creation, instance creation etc)
  - How the XBRL integration was achieved (used existing XBRL toolkit, built own XBRL capability etc)
  - What problems were encountered
  - What enhancements to current API's would they like to see

API WG - Survey Status

- Survey is still open and we'd love to hear from you!
- http://www.xbrl.org/news/provide-your-input-take-api-survey
- Initial results are on the following pages but:
  - They are incomplete and based on a relatively small sample - 61 respondents
  - For key questions only around 50% of respondents provided a response (i.e. others skipped those questions)
  - There were some conflicting results, i.e. the responses to one question did not tally with the responses to another question

API WG - Survey Responses

- Respondents
  - Majority of respondents are XBRL developers, consultants and solution providers.
  - This is followed by XBRL users
  - Smallest group are taxonomy authors and regulators

- XBRL Integration
  - B2G respondents were more than double those using B2B
  - Respondents using XBRL to normalise data or to produce internal reports is almost half the number of those submitting instance documents to regulators

Specifications and Document Persistence

- Specifications used
  - The dimensional specification was in use by nearly all respondents
  - Over half use the formula specification
  - Nearly half use inline XBRL
  - About a third use the versioning specification (??)
- Taxonomy and Instance Persistence
  - The majority store taxonomies (50%) and instances (63%) in the file system
  - A third of respondents store taxonomies and instances in relational data bases
  - A relational model for taxonomy persistence could be useful?

Integration Approaches

- Mapping to Core Data
  - Wide variety of approaches with the majority (although less than half) taking a completely customised approach. Only a small minority are XBRL all the way down
- Use of APIs
  - Mixture of custom development and external components characterises most XBRL-enabled implementations
  - Only a small minority were able to achieve their XBRL goals entirely with sourced rather than built components.
- Project Type
  - Nearly all respondents developed their XBRL capability in-house with more than half incorporating existing components into their solutions

Challenges and Areas of Difficulty

- Challenges in order of significance:
  - The specifications are difficult to understand (by WIDE margin)
  - On-going maintenance (especially with taxonomy versioning)
  - Finding appropriate expertise
  - Understanding the integration process
  - Integrating the various components of the solution
- Specific areas of difficulty in order of significance:
  - Validating instance documents for semantics or accuracy
  - Working with the formula specification
  - Mapping source data
  - Validating instance documents against a taxonomy
  - Processing extremely large documents
  - Maintaining or versioning taxonomies

Survey - General Observations

- What respondents want are higher level API's oriented to business requirements, e.g. instance creation and validation. Existing API's are too closely mapped to the XBRL specifications rather than business requirements

- XBRL Dimensions are seen by respondents as an integral part of the XBRL specification and should not seen as an add-on

- The XBRL specifications are too complex for developers who are building business applications.

Next Steps

- The survey is still open so please consider responding
- http://www.xbrl.org/news/provide-your-input-take-api-survey
- Fuller analysis of the survey and report to XSB
- Co-ordinate with other working groups (e.g. Abstract Modelling, Table etc) to ensure no duplication of work or inconsistencies