

## XBRL Review and Quality Assurance - Magnify Professional Services

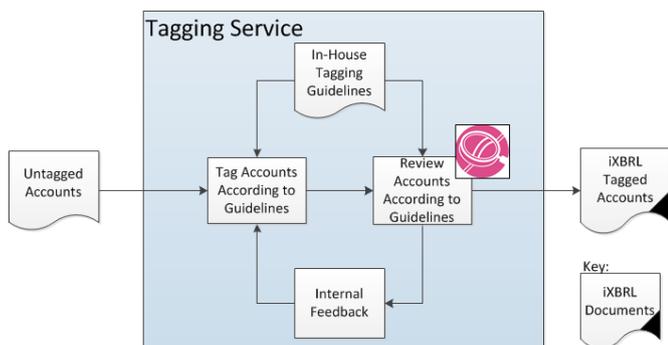
This document describes how CoreFiling Professional Services can be used to enhance an organisation’s ability to provide world-class review and quality assurance for XBRL filings. This is primarily carried out by leveraging extension points within CoreFiling’s XBRL review tool, Magnify, that allow for powerful automated checklists to be included alongside the standard review functionality.

Automated checklists are written in CoreFiling’s XBRL business rules language – Sphinx. Sphinx is specifically designed to enable rules to be written against XBRL documents quickly and accurately. This enables CoreFiling to provide XBRL review automation rapidly and with a high return on investment. Rules can also be written against the True North API that is the cornerstone of CoreFiling’s XBRL products. This allows for cases where the checks desired fall outside the scope of the Sphinx language and completes the ability to automate extensive checks for both filings and taxonomies.

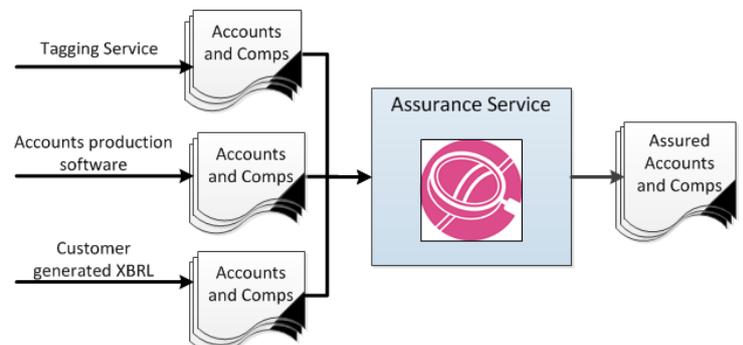
Using our expert team to create review checklists you can increase throughput of XBRL documents through the services that you provide while simultaneously increasing the completeness and quality of a review. Bright lines can be realised in complex XBRL review processes, unlocking the power of XBRL as a computer readable standard.

### Overview of the Tagging, Review and Quality Assurance Process

An outline of a typical *tagging service* is shown below as Process 1; the use of Magnify is shown by the Magnify logo. In-house guidelines are laid down by senior staff enabling all accounts to be tagged to the same quality. The service includes review stages with feedback from internal reviewers to further enhance the quality of the tagging process.



**Process 1: A typical XBRL tagging service**



**Process 2: All XBRL documents processed through a single assurance service**

An outline of a wider XBRL quality *assurance service* is shown as Process 2, where the position of Magnify is again shown by its logo. Enhanced through customisations provided by CoreFiling’s Professional Services team, Magnify is central to making sure that XBRL documents are of high quality and that errors are identified and eliminated.

For the purpose of XBRL quality assurance, documents generated by the *tagging service* can be treated in the same way as any other XBRL documents. With checklists, Magnify is the only software required to perform quality assurance on all iXBRL and XBRL documents – it does not matter where they originate.

CoreFiling’s products and services are applicable to *any and all* global XBRL filing mandates and *all* iXBRL and XBRL documents.

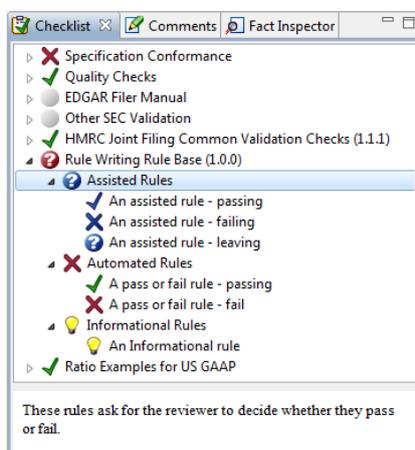
# Elements of a Successful XBRL Quality Assurance Service

## Software that allows viewing of XBRL documents and more

Clear and intuitive XBRL document viewing and quality checks using business rules makes Magnify the only software you need to provide XBRL quality assurance services. The business rules checks are implemented in a simple to use checklist form, as shown below, and can be a mixture of automated, assisted or informational checks.

Automated checks require no input to see if the document passes. Assisted checks allow users to mark issues as accepted or rejected and to add comments to explain the decision. Finally, informational checks can be used to highlight specific areas of a document or carry out calculations to aid review.

Completed checklists, including comments, can be exported, printed or saved as *review projects*. Magnify's review project file format is designed to allow review information to be exchanged easily between reviewers. Alternatively, review projects may be stored within enterprise-wide document or case management systems.



## A set of criteria to use for review

Magnify checklists are created based on real review processes taken from existing workflows. CoreFiling's Professional Services team can help you identify areas where existing manual effort can be automated and documented. The flexibility and power of the underlying rules means that it is possible to capture even complex checks in an automated way.

## Multiple reviewers with different responsibilities

Review processes often require varying levels of validation, often by different users. Checklists and review projects are customised to ensure that the flow of the review process allows this separation of responsibilities. As a result, staff resources can be used effectively throughout the review.

## High-quality, consistent review

Checklists can be stored in a single centralised location so that those using checklists always have the latest version and every reviewer can use the same quality checks.

This improves the consistency of review across distributed teams and means that increased experience can easily be shared across all offices.

## Focussed review and documentation

The checklist includes the ability to create customisable issue messages that can be linked to any fact in the document. These messages can include dynamic content taken from the document or the reporting taxonomy, and allow issues to be resolved efficiently. In addition, facts within the document are linked to the relevant checklist issues to further streamline the review process.

An informative and comprehensive report of the review process can be obtained by exporting checklists and the review comments. This report clearly outlines every check performed, the outcome of each and any additional issues raised.

# An Example of an Automated Checklist Review

## The problem

SEC filings make use of XBRL calculation validation. Following the SEC disclosure guidelines can lead to calculations inconsistencies such as where there are reduced reporting requirements for quarterly data or when summary historic data is included.

XBRL validation marks these as calculation errors, which must be resolved and documented; however, these actually represent “acceptable” inconsistencies which are caused by XBRL calculation validation limitations.

Traditional review approaches require the reviewer to manually examine the calculations triggering the error, find the differences between the calculations and subsequently check whether the inconsistency is explained by the disclosure requirements. Finally, the reviewer would have to write an explanation of why the inconsistency was acceptable to explain the issue to their client or management.

This process can take approximately ten minutes to resolve each calculation inconsistency.

## The solution

CoreFiling write custom rules to process each fact that has calculation inconsistencies. Each fact that represents an inconsistent total is checked to see if the reasons for the inconsistency can be identified, these are flagged as being a false positive with a full, automatically generated explanation.

Using rules such as these to identify false positives gives full automation of the resolution of “acceptable” inconsistencies, allowing the reviewer to focus only on true inconsistencies that must be addressed.

## The results

Analysing all 10-K and 10-K/A SEC filings\*, there are an average of 20 “acceptable” calculation inconsistencies meaning that, without automation, reviewing just the non-issues in an average filing once takes more than three hours. Taking into account human-error and multiple reviews, this adds \$1,000s on to the cost of XBRL review.

The numbers make it clear that massive savings are possible by moving to automated reviews over traditional methods, this is just one example of unlocking the promised efficiency improvements that XBRL brings.

\* All 10-K filings, 4,200 in total, received between 01/01/2010 and 29/02/2012

## What CoreFiling did

It is the difficulty of efficient realisation of such savings that means that traditional review methods remain in use for XBRL filings.

CoreFiling break down manual processes to define them in technical XBRL terms and identify the rules required for automation. Full, best-practice software development techniques are applied to creating checklists for Magnify extension points. This process delivers the most savings in the quickest time possible.

## The Benefits of Using CoreFiling for Rule Writing

For the best end-user experience and value for money, CoreFiling are uniquely positioned to provide expert rule writing services, offering the following benefits:

- *Reduced cost* - CoreFiling has a number of advantages over other companies writing Sphinx rules that enable us to provide complex business rules at a reduced cost:
  - The CoreFiling Professional Services Sphinx library contains common patterns and functions that are utilised to write rules – we do not write rules from scratch.
  - Mature development and test environments are already in place.
  - Direct access to the source and developers.
  - Sometimes one rule can do the work of hundreds, time is not wasted on new rules when an adjustment to an existing rule is a better solution.
- *Quick turnaround and highest business value*
  - CoreFiling use Agile project management methodologies that acknowledge and plan for changes in scope and priorities. This allows new rules to be implemented without long lead times and obstructive change control.
- *Highest quality*
  - The same testing environments are used for all CoreFiling products and services. These are mature, production-quality continuous integration systems that have had many years of development.
  - The performance of rule sets is continuously measured and optimised, leading to a better experience for the end user.
- *Access to experts in dimensional data and XBRL technology*
  - Ensures that assumptions in rule writing are sensible, understood and applied explicitly and consistently.
  - What if the taxonomies change? What if the XBRL.org servers are not available? CoreFiling has the experience to plan for and to avoid otherwise expensive XBRL events.
  - Perfectly matched skill set, our consultants are experts in Sphinx, XBRL technology, dimensional data and software quality.
  - Agile project management and test-first methodology means that the rules are correct first time.

## Ask us!

Ask us about workflow review to find out how much you can save on your current processes.

Ask us about your complex requirements to find out how we push the boundaries of XBRL taxonomy and instance review.

Ask us about integration into your systems to find out how improving quality and automation can be seamless.

## Contact

Contact CoreFiling Professional Services at [sales@corefiling.com](mailto:sales@corefiling.com).