

Online filing of annual reports

Technical framework

Version 1.2

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1 Background and purpose

This document describes the technical framework for infrastructure as well as guidance on how a software supplier connects to and uses Bolagsverket's (Swedish Companies Registration Office) services for digital submission of annual reports. It provides a summary of the system solution for online filing of annual reports.

The target group for the document is mainly technical personnel who will integrate with the services.

1.1 Technical framework

In addition to this document, the technical framework also includes the documents listed in Chapter 7 "References".

1.2 Definitions

The following definitions apply to this document:

Term	Description
iXBRL	Inline XBRL – an XHTML document containing data tagged according to an XBRL taxonomy
XBRL	eXtensible Business Reporting Language, an XML standard for reporting different types of business information
XHTML	eXtensible HyperText Markup Language, a stricter version of HTML. Document format used for presentation in a browser
XML	eXtensible Markup Language is a standard developed by W3C. XML is a way of structuring data. XML makes it easy for a computer to generate data, read data and ensure that data structures are unambiguous.

2 Introduction

Bolagsverket's services for online filing of annual reports are used:

- To retrieve basic information about limited liability companies from Bolagsverket's registry when preparing the annual report
- To submit an electronic copy of the annual report to Bolagsverket
- To follow up the annual report status after submission.
- To receive statistics of how the services are used.

How to setup a secure connection to the services is described in Chapter 3. The infrastructure and actors are described in Chapter 4. How services of consumers, intermediaries and producers typically interact are described using sequence diagrams in reference 1 "Online filing of annual reports Connection Guidelines".

Instructions for access to test and production environments can be found in reference 3 "Online filing of annual reports Connection Guidelines".

3 Secure communication

Communication between the parties involved in the infrastructure is encrypted using TLS with domain certificates issued by a trusted certificate issuer.

Authorization is done by matching the organization number in the consumer's connection agreement with the information in the organization certificate. A connecting client must:

- Request a firewall opening to Bolagsverket's server environments
- Call the services using TLS with an approved client certificate
- Inform Bolagsverket which serial number the certificate contains

Details and further instructions can be found in reference 3 "Online filing of annual reports Connection Guidelines".

4 Infrastructure and actors

The following image gives an overview of the actors and services that work together for users to be able to submit their annual reports digitally:

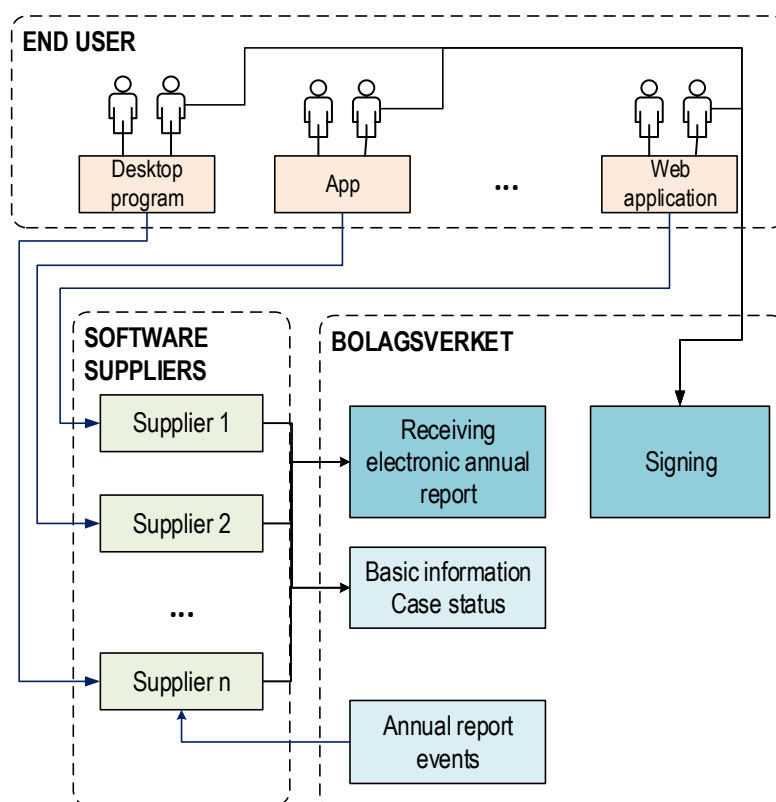


Figure 1: Overview infrastructure

End users use the systems to prepare a digital copy of the annual report, to submit it for signature and to review and sign the copy.

Suppliers provide software to create a digital copy of the annual report in iXBRL format, submit the copy to Bolagsverket, and use Bolagsverket's information services to facilitate preparation and to inform end users about case status and events.

Bolagsverket provides information services, receives and stores digital copies of annual reports and provides e-service for review and signature of digital copies of annual reports.

5 Service specifications

The services are divided into four groups:

- Information services
- Services for filing
- Services for annual report events
- Services for statistics for annual report events

Information services provide information on

- Basic information: name, accounting period, representatives etc.
- Case status, i.e. the status of the most recently submitted annual report

Services for filing consist of

- Create user's own storage space for filing
- Verify
- Send the report to user's own storage space

Services for annual report events consist of

- Create subscriptions to company annual report events
- Cancel subscriptions to company annual report events
- Retrieve all annual report events for one company

Services for statistics for annual report events consist of

- General statistics for submitted annual reports
- Statistics grouped by software
- Statistics for digitally submitted annual reports with separate audit report
- Statistics for digitally submitted annual reports where the automated controls were triggered
- Utility service to list the softwares of a software vendor

For detailed descriptions of the services, see reference 4 "Service specifications Online filing of annual reports" and reference 1 "Online filing of annual reports Technical Guide".

6 Test before production

Bolagsverket provides a test environment that may be used by suppliers to develop and troubleshoot system solutions for online filing of annual reports. Connection to test environments is described in reference 3 "Online filing of annual reports Connection Guidelines".

7 References

This document refers to the following technical documentation, which is available on Bolagsverket's website [Online filing of annual reports](#):

1. Online filing of annual reports Technical Guide
2. Implementation guidelines annual reports iXBRL
3. Online filing of annual reports Connection Guidelines
4. Service specifications Online filing of annual reports

Information on taxonomies for the annual report is published on the organization-wide website taxonomier.se.