Contributing

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Sustainsys.Saml2 is maintained by and have mostly been developed by Sustainsys in Stockholm,

Sweden. The library's source code is hosted on [github](https://github.com/Sustainsys/Saml2).

When doing work on protocol features, it is recommended to consult the

[official SAML specifications](https://wiki.oasis-open.org/security/FrontPage#SAMLV2.0Standard).

## Issue tracking

Github issues are used to keep track of issues and releases. For requests of functionality or

to report bugs, please open an issue in the github repo.

It is advised to open an issue describing the plans before starting any major coding work.

Discussing before writing code significantly reduces the risk of getting a pull request

denied.

## Versioning

Sustainsys Authentication services uses semantic versioning as defined on http://semver.org/.

Given a version number MAJOR.MINOR.PATCH, increment the:

MAJOR version when you make incompatible API changes,

MINOR version when you add functionality in a backwards-compatible manner, and

PATCH version when you make backwards-compatible bug fixes.

## Coding Conventions

The coding conventions follow the classic .NET style of coding, with the following

styles:

\* Always use `{}` for `if` statements, even when there is only one line.

\* Code analysis is enabled and all code should compile without compiler warnings or

code analysis errors. Code analysis warnings that are not relevant are supressed in

the source. Rules should only be disabled on a global level if it really is appropriate to

disable the rule for the entire code base. Unknown words are added to `CustomDictionary.xml`

instead of suppressing individual warnings.

\* Private members in classes are named with camelCasing, no underscores or similar.

\* Member variables are not prefixed with `this.` unless required to resolve ambiguity (such

as in a constructor having parameters with the same name as the members).

\* Any single method is short enough to fit on one screen (on a typical laptop monitor,

not a 30-inch development monster-monitor in vertical orientation).

\* The code is formatted to (mostly) fit in 80 columns.

## Unit Tests

The Sustainsys.Saml2 library has been developed using TDD (Test Driven Development). All

functionality is covered by tests, and it will remain that way. Pull requests will only be

merged if they contain tests covering the added functionality. Parts of the code that aren't

practically possible to test because of tight integration with the web server (see e.g.

`CommandResult.ApplyPrincipal`) are excluded from this rule and should be marked with a

`[ExcludeFromCodeCoverage]` attribute. The code coverage report is at 100.00% coverage and

should remain so.

## Continuos integration / build server

All pull requests are built on AppVeyor and code coverage is checked.

## Branching

To make a clean pull request, it is important to follow some git best practices. Nancy

has an [excellent guide](https://github.com/NancyFx/Nancy/wiki/Git-Workflow) that outlines

the steps required.

## Licensing

The library is licensed under LGPL and by submitting code it is accepted that the submitted

code will be released under the same license. Third party code may only be added to the library

if the author of the pull request holds the copyright to the code, or the code is previously

licensed under a license compatible with LGPL.