



Koordinierungsstelle
für IT-Standards

Comparison of AS4 solutions for Peppol

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(Coordination Office for IT-Standards)

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History

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Content

1	Introduction	1
2	AS4 Open Source Solutions	1
2.1	Domibus	1
2.2	Holodeck	1
2.3	Oxalis	1
2.4	phase4	2

1 Introduction

This document evaluates known AS4 Open Source solutions for use with Peppol. It is intended for those who want to become a service provider and shall support the software selection for the AS4 solution.

2 AS4 Open Source Solutions

All the listed AS4 solutions in this chapter are Java based solutions. The list is in alphabetical order.

2.1 Domibus

This is considered the “reference implementation” of the EC. It is a standalone application to be downloadable from

<https://ec.europa.eu/digital-building-blocks/wikis/display/DIGITAL/Domibus>, licensed under the EUPL 1.2.

It is a large software project that may be challenging to configure and sensitive to incorrect configurations. The feature set may be extensive, but the learning curve is very steep. The “dynamic discovery” components were later added, and the degree of complexity also appears to be high.

For support requests, the EU eDelivery Helpdesk is very helpful.

2.2 Holodeck

Holodeck is an Open Source solution developed by Sander Fieten (Chasquis Consulting). The website is <http://holodeck-b2b.org/> and the license chosen is mostly GPL 3.0 (Copyleft), except for the shared Java interfaces which are licensed under the LGPL.

It is a standalone application that claims to fully support AS4. Unfortunately the “dynamic discovery“-components are not Open Source but must be paid for separately.

Commercial support is available. Resources are limited.

2.3 Oxalis

Oxalis is an Open Source solution originally developed by the Norwegian agency for digitalization (formerly difi, than Digdir, now DFO). The maintenance of the project was moved to “Norstella”, a Norwegian non-for-profit organisation. The location is <https://github.com/OxalisCommunity> and the license is EUPL 1.1.

It is extensively used in the Peppol area but is not 100% CEF AS4 compliant (see the Test report at the CEF AS4 compliant solution page). Oxalis is provided as a standalone solution. The AS4 part is a “plugin” that must be separately installed along with Oxalis. Oxalis has not been proven to be a true generic AS4 solution.

Due to its extensive Peppol usage, the support for the dynamic discovery can be considered good, even though it is unclear whether the CEF specific configuration is supported.

Norstella provides support options.

2.4 phase4

phase4 is an Open Source solution developed by Philip Helger. The website is <https://github.com/phax/phase4> and the license chosen is the Apache License 2.0 (non-copyleft).

It is a shared Java library and meant to be integrated into existing applications to simplify the usage of AS4. It has complete documentation and contains the fewest external dependencies. The software does not ship with a user interface and needs deeper integrations into the system using it.

Commercial support is available. Resources are limited.