

DG DIGIT

Unit.D2 (Interoperability Unit)

Open Source Software Country Intelligence Report Austria 2020

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AUSTRIA

Executive summary

The Federal Ministry for Digital and Economic Affairs (*Bundesministerium Digitalisierung und Wirtschaftsstandort*)¹ is the federal entity responsible for all digitisation issues in Austria, including eGovernment services and open source software (OSS) solutions. Within the Ministry, the eGovernment Innovation Centre aids the further development of the digitisation strategy and is responsible for hosting the Ministry's OSS solutions for eGovernment services. Additionally, a new government was formed in Austria in January 2020. As part of the new government programme, a master plan for open source software is set to be developed. However, in light of the COVID-19 crisis, the government programme will be reviewed

Over the last decade, several political initiatives have been implemented at the federal level regarding the use of OSS solutions in the public sector, in special within schools and public administrations. Although it remains to be seen whether such policies will be updated through new political strategies, the provision of open source tools for the development of eGovernment services, and a special distribution of GNU/Linux specifically for schools are encouraging developments in this policy domain.

There are several strategic players working to promote the adoption of OSS solutions in public administrations and raise general public awareness about OSS nationwide. Furthermore, there exists an impressive number of initiatives at the local and municipal level that have put in place in recent years, signalling a willingness among citizens and federal government staff to move towards the use of OSS solutions in public administrations in Austria.

Actors

This section presents the policy makers who are active in digitalisation efforts and influence the status of open source in public sector, as well as the main strategic players that work together with the government at all levels to raise awareness on OSS. In Austria, there is no governmental body that is specifically responsible for OSS policies.

Policy maker

• The Federal Ministry for Digital and Economic Affairs (*Bundesministerium Digitalisierung und Wirtschaftsstandort*)² is responsible for all digitisation issues, including eGovernment services, the coordination of IT matters, and policies pertaining to OSS solutions. The eGovernment

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https://www.bmdw.gv.at/

² https://www.bmdw.gv.at/

Innovation Centre (EGIZ) is a joint venture between the Technical University of Graz and the Federal Ministry and aids the further development of the ICT strategy of the federal government, and it conducts research in the area of technical innovation in the eGovernment environment.³

Strategic players

- The Open Source Software Business Innovation Group⁴ (OSSBIG) is an open-source non-profit organisation which helps to foster the use of OSS solutions in Austria. Its members represent some of Austria's largest businesses as well as public sector organisations. The group is responsible for sharing open source practices both in businesses and in public administrations, promoting OSS as an alternative to proprietary software, positioning OSS solutions with key decision-makers in business and politics, and promoting cooperation between the private and public sector in the areas of innovation and digitisation.⁵
- The Free Software Foundation Europe (FSFE) in Austria is a non-profit organisation working to increase support for and the general understanding of free and open source software, and open standards in the public and private sector. There are two groups, one operating at the national level and one operating at the local level in Vienna. A key focus for the FSFE, both from an Austrian and EU perspective, is the "Public Money? Public Code!" campaign, calling for the implementation of legislation requiring publicly financed software developed for the public sector to made public available under a free and open source software licence. 6 While information about the national FSFE group and the local FSFE group in Vienne is available online, there is no information about their recent activities.

Policy and legal framework

This section summarises the main open source software related policies and legal acts of the last ten years, including the first known milestone in this domain. The list is presented in a chronological order, starting from the most recent milestone.

• In 2019, the Chief Digital Officer Task Force was established to coordinate the digitisation strategy in all Ministries. The previous multi-year strategic planning proved to be too inflexible due to the frequently changing conditions and priorities. Therefore, the digitalisation strategy, Digital Austria in 2050⁸, is now being implemented through Digital Action Plans that are based on four common future visions and mission statements. Since these Action Plans are oriented at defined target groups and business processes, the use of OSS is not a primary goal. However,

³ <u>https://www.egiz.gv.at/en/ueber-egiz</u>

⁴ https://www.ossbig.at/

https://www.ossbig.at/verein/

⁶ https://opensource.org/node/896

⁷ https://wiki.fsfe.org/LocalGroups/Vienna

⁸ https://www.digitalaustria.gv.at/

the matter of whether an open source strategy to improve and promote interoperability is being examined as a potential aspect of the government's digitalisation strategy. Additionally, OSS is a topic of strategic importance in the government. At present, the Federal Ministry of Education, Science and Research is evaluating the potential for further use of open source software, and open source software will also be a key topic for the technical consolidation of data centres in Austria.

- The Digital Austria platform⁹ was founded in 2005 as a comprehensive platform in the Federal Chancellery to coordinate a uniform federal eGovernment strategy by the federal government, the federal states, cities, municipalities and businesses.¹⁰ As part of this initiative, an open source platform was launched on the Digital Austria platform. The platform hosted free and open source modules, including modules for the simplification of electronic signatures, implementation of a Citizen Card Environment, electronic delivery services, and validation of PDF document signatures.¹¹ In 2012, the open source platform was frozen, and the existing projects were transferred to EGIZ's Joinup page¹² and the official EGIZ website.¹³
- In 2009, the Austrian Federal Ministry of Education, Arts and Culture approved a policy initiative¹⁴ supporting a special edition of a GNU/Linux distribution designed specifically for use in schools. As part of this initiative, the Ministry contacted all Austrian school principals recommending that they use the distribution and highlight its aim of promoting the installation of OSS solutions on Austrian school computers.

Open source software initiatives

This section presents an overview of the main open source software related initiatives in Austria. The list is presented in a chronological order, starting with the most recent initiative.

OpenFoam manual, 2020¹⁵: Researchers from the Johannes Kepler University¹⁶ in Linz published
a manual for engineers seeking to simulate additively manufactured (AM) cooling channels using
the OSS solution OpenFoam, a C++ toolbox.¹⁷ The researchers outlined their experiences in an
informative manual for practitioners, engineers, and students to help improve their knowledge
of OpenFoam and their software simulations.

⁹ https://www.digitales.oesterreich.gv.at/documents/22124/30428/E-Government-ABC.pdf/b552f453-7ae9-4d12-9608-30da166d710b

 $^{^{10}\ \}underline{\text{https://www.bmdw.gv.at/dam/jcr:8fc815bb-1dc7-4e45-9610-78d63560944a/E-Government-ABC\ 2019\ EN.pdf}$

¹¹ https://www.egiz.gv.at/en/e-government/8-joinup/

¹² https://joinup.ec.europa.eu/collection/e-government-innovation-center-egiz/about

https://www.egiz.gv.at/en/schwerpunkte

¹⁴ https://opensource.org/files/100416_Open_Source_Policies.pdf

¹⁵ https://www.metal-am.com/austrian-researchers-publish-quide-to-am-cooling-channel-simulation-with-open-source-software/

 $^{{}^{16} \; \}underline{\text{https://www.jku.at/institut-fuer-polymer-injection-moulding-and-process-automation/}} \\$

¹⁷ https://zenodo.org/record/3569172#.Xp13icj7Q2w

- OpenAtlas, 2017¹⁸: OpenAtlas is an Austrian open source, web-based database system which
 maps complex archaeological, historical and geospatial data. The source code is available on
 GitHub¹⁹, and it uses OSS such as Apache, PostgreSQL, PostGIS, Python 3, Flask, and Leaflet.²⁰
- Open Source Software Funding, 2016²¹: In 2016, the Austrian government announced a prize fund of EUR 200,000 to be awarded to open source projects on eGovernment, eHealth, eLearning, eInclusion, and other services. Funding could be used to cover the cost of launching a product or service, testing, or improving an existing software application. The most recent information available regarding calls for projects under this funding initiatives is from 2018.
- OSS in Vienna, 2014²²: As of 2014, OSS solutions have been well-established in Vienna's IT operations, with the city promoting the use of OSS solutions. Solutions such as Linux, Apache, Postgres, MySQL, and VLC are used widely in order to reduce costs and prevent vendor lock-in. Indeed, Vienna has historically been a pilot city for the use of OSS and the local government even developed its own distribution of Linux, Wienux, to be used on the city's workstations. Wienux was replaced with proprietary software in 2009. Nevertheless, it was a trailblazing development in the use of OSS in public administrations in Austria.
- Voralberg and Quantum GIS, 2013²³: In early 2013, the state of Voralberg became the first silver sponsor for improvements to Quantum GIS, an OSS solution for managing geographic information, with a donation of EUR 5,000. Voralberg uses Quantum GIS widely throughout the desktops in their public administration, and therefore, funding improvements in the form of sponsorship represents a responsible use of public funds.
- Mocca, 2012²⁴: The Modular Open Citizen Card Architecture project was established by the Federal Chancellery of Austria and Graz University of Technology to develop a modular, open source citizen card environment.²⁵ The software allows citizens to verify electronic signatures, encrypt documents, and generally make use of eGovernment services. The software is used by the Austrian government for all eGovernment services and all electronic applications that are provided to citizens nationwide.²⁶
- eLearning competence centre, 2011²⁷: In 2011, the Federal Ministry of Education funded an eLearning competence centre with the aim of increasing the use of OSS solutions, such as

¹⁸ https://openatlas.eu/

¹⁹ https://github.com/craws/OpenAtlas

²⁰ https://www.oeaw.ac.at/acdh/tools/openatlas/

²¹ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/eur-200000-austria

²² https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/city-vienna-increasingly-t

²³ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/austrias-voralberg-state-spo

²⁴ https://joinup.ec.europa.eu/solution/mocca

²⁵ https://www.buergerkarte.at/konzept/securitylayer/spezifikation/20040514/Index.en.html

 $^{{\}color{blue} {}^{26}} \ \underline{\text{https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/austria-publishes-open-source} \\$

https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/education-ministry-funds

Moodle, Desktop4education and server4education, in schools. The staff working in the *Kompetenzcluster Süd* help to update these solutions, increase the software capabilities, and provide training sessions on free and open source solutions.

- Bregenz telephone system, 2011²⁸: Since the 2011, the city of Bregenz has been used an open source and IP-based telephone solution within their telephone infrastructure. The solution has massively reduced licencing and maintenance costs, and it was designed to meet the specific needs of the municipality.
- Desktop4education and server4education, 2009²⁹: With support from the Austrian Federal Ministry of Education, Arts and Culture, a versions of GNU/Linux distributions have been developed specifically for schools, with the aim of promoting the use of OSS solutions in classrooms. Aside from financial benefits, the initiative aims to provide students with a more varied IT education.³⁰ The use of OSS in schools has been further bolstered in light of the government's decision to halt funding for proprietary software in schools in 2009.³¹
- Ministry of Justice, 2008³²: Since 2008, the Austrian Ministry of Justice has been using OpenOffice on several thousand desktop PCs, following a mass-migration from proprietary software that was no longer meeting the needs of the Ministry. The migration was completed over a 14-month period, with the assistance of 8 trainers to provide informative training sessions and general information about the new software. In 2011, the Ministry expanded its use of OSS to include an open source web application for data warehousing.³³ The application is based on Apache, mySQL, php, and JavaScript, and it was chosen to carry out reliable data evaluations which were not possible with the proprietary software that was previously being used.

²⁸ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/city-bregenz-reduces-c

²⁹ <u>http://d4e.at/</u>

 $[\]frac{30}{\text{https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/education-ministry-support}}$

³¹ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/education-ministry-no-lon

 $^{^{32}\ \}underline{\text{https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/department-justices-m}$

³³ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/ministry-justice-uses

