BRUSSELS 3 FEBRUARY - 4 FEBRUARY FOSDEM 18 .org FOSDEM FOSDEM OSDEN

8000+ hackers • 600+ lectures • lightning talks • devrooms • beer

WELCOME TO THE 18TH EDITION OF FOSDEM



INFODESK

In this booklet, you will find useful information about the conference and the venue. If you have any questions, the volunteers at the infodesks will be happy to help you. The main infodesk is located in building K. A secondary infodesk can be found in building H. Staff and volunteers also roam around the campus and can be recognised by their bright yellow and orange T-shirts. There is a handy map on the back of this booklet, pointing out the locations of all buildings, rooms, and the infodesks.

TABLE OF CONTENTS

- 05 General information
- 07 Getting around
- 08 Developer rooms
- 09 Stands
- 10-15 Floor plans
- 16-20 Sponsors
- 22 Surroundings

FIRST AID

A Red Cross first aid team is present during the weekend. This team is located behind the large auditorium on the second level of the K building.

In an emergency, you can phone the infodesk on +32 2 788 74 74

FRINGE EVENTS

The FOSDEM Fringe consists of independent events involving free and open source software taking place in the days around the FOSDEM weekend. They are organised independently of FOSDEM.

The list of events can be found on the FOSDEM website at **fosdem.org/2018/ fringe**

2 FOSDEM 2018

CODE OF CONDUCT

In order to keep FOSDEM a fun, interesting and positive experience for everybody, we expect participants to follow the guidelines below.

FOSDEM aims to be a free, open and cooperative event. This means we expect collaboration from all the FOSDEM participants, and for everybody to behave respectfully towards all others, including those that are different or think differently from yourself.

Please be helpful, considerate, friendly and respectful towards all other participants and respect the environment. We don't condone harassment or offensive behaviour at our conference. We consider it against our values as human beings. We're voicing our strong, unequivocal support of exemplary behaviour by all participants.

Please remember that all FOSDFM participants are here by invitation of the conference organisers and the ULB. We expect all participants to follow this Code of Conduct during the conference and related events. This includes conference-related social events at off-site locations, and in related online communities and social media. Participants asked to stop any unacceptable behaviour are expected to comply immediately. Conference participants violating this Code of Conduct may be expelled from the conference and/or banned from formal participation in future events.

Please bring any concerns to the immediate attention of our coordinating team, by phone +32 2 788 74 73 or email conduct@fosdem.org

Thank you for your help in making FOSDEM a success and pleasant for all the people involved.

VOLUNTEERS SOUGHT

FOSDEM is a conference entirely made by volunteers. While a small crew works on it year-round, most of the work during the conference is done by a large, enthusiastic group of great people who donate their time to make FOSDEM happen - you. And this year is no different - we need your help. Please spare an hour or two to help introduce speakers, run the cloakroom and infodesks or clean up after the event, etc. Just walk up to one of the Infodesks and say you would like to volunteer, we will take care of you.

DONATIONS

FOSDEM is free to attend. The event is organised by volunteers and funded entirely by sponsors, the sale of T-shirts, and individual donations.

In order to keep the event free, we kindly ask you to buy a T-shirt and/ or to make a donation at one of the infodesks. Your donation supports FOSDEM 2018 and future editions. Depending on the amount you donate, you will receive one or more of the following along with our gratitude:

T-shirts are available in **male sizes:** S, M, L, XL, XXL.

In **female sizes:** S, M, L, XL, XXL.

It is not possible to get a refund for any reason. Donations are not tax-deductible.



	EUR 25,00	EUR	50,00	EUR 100,00
FOSDEM	Ö	Ö		Ö
T-shirt	ede .	and the second se		44 C
FOSDEM			Ö	
Hoodie			- 34	
O'Reilly pocket book		O		
O'Reilly book				0

GENERAL INFORMATION

NETWORK

We are only providing Internet services on the campus of ULB. The only two ESSIDs we provide are FOSDEM and FOSDEM-dualstack and neither of them requires a login. If you notice anything unusual, especially requests for usernames and passwords, please contact a staff member (yellow t-shirts) immediately or send email to security@fosdem.org. Additionially, we suggest you are always careful using public networks. Update your OS and software, stop daemons you don't need, run a firewall, and especially take care only to connect to encrypted sites and services Tunneling through a VPN from public networks is always a good idea.

ONLINE SCHEDULE

The full conference schedule is available on our website: fosdem.org/schedule/

There are third-party applications for just about every smartphone operating system. Check your respective app store/market or see the list at fosdem.org/schedule/mobile/

ACCESSIBILITY

While we don't own the university campus and have little control over its accessibility, we have tried to find ways for developers with physical limitations to make the most of the event. All rooms except for **AW1.121** and **AW1.125** are accessible to wheelchair users. There are ramps and lifts. The accessible routes and the location of the lifts are not always obvious but FOSDEM staff and volunteers will be happy to show you around. We reserve a limited number of seats at the front of both main track rooms for developers with hearing or visual impairments. We cannot make advance reservations in every developer room, but accommodations can usually be made on the spot.

CLOAKROOM

Do you want to get rid of heavy bags, or are you tired of carrying your coat or umbrella around with you? Store them free of charge at our staffed cloakroom during the event. Simply follow the signs in the K building.

LOST PROPERTY

Lost one of your precious belongings? Found something that looks like someone lost it? Please go to the infodesk in the K building for assistance.

LOST ON CAMPUS?

Try our wayfinder at nav.fosdem.org

CATERING

There are three places on the campus where you can get food and/or drinks (see the map at the back for the exact locations).

The cafeteria in the F building (between K and U) has comfortable seating and serves espresso, breakfast, sandwiches, beer and drinks during the event.

The food court has catering vans offering hot food including burgers, hot dogs, sandwiches, vegetarian wraps, and waffles. The food vans will be located on the square between the F and U buildings.

The second bar is located under Janson and offers sandwiches, drinks and loads of beer. Please try to stay quiet while in there. People in Janson can hear you. In the area surrounding the campus there are many other shops and restaurants where you can get food. See the surroundings map on page 22-23.

CASH POINTS

There is a cash point on the campus, just past the main bar near the food stands, but experience shows that it runs out of cash quickly during FOSDEM. An alternative cash point can be found at 466, Chaussée de Boondael. To get there, leave the campus towards where the buses and trams stop, and continue straight ahead until the third roundabout and turn left there. You will find the cash point on the left side of the street.

DO US A FAVOUR...

GARBAGE & GLASS

Please try to keep the campus clean! Throw your garbage into the bins. If you see a full bin, please let staff, volunteers, or infodesk know. Glass bottles should be put in the boxes located near some bins or in the designated container near the lower level of the H building. If you see people scavenging bottles, please report them to security, staff, volunteers, or infodesk immediately.

CLEANUP

After FOSDEM is over, we will need to clean up, and quickly. We would greatly appreciate your help. This can be as simple as helping stands carry their equipment, grabbing a broom and cleaning the floors, or lend a hand collecting all of FOSDEM's gear. Simply talk to staff, volunteers, or infodesk.

FEEDBACK

How are we doing? Are you enjoying this edition of FOSDEM? Is there anything we can do to make future events better? Please take a minute to fill in our feedback form on page 21.

GETTING AROUND Meeting people and doing things

PUBLIC TRANSPORT

The following STIB/MIVB routes call at "ULB"

- Bus 71 De Brouckère Delta
- Bus 72 ADEPS Devèze-ULB
- Tram 25 Rogier Boondael Gare
- Tram 94 Louise Musée du Tram

See the back cover for a map.

TAXI

If you need a taxi, we suggest calling taxis verts on +32 2 349 49 49.

The address of the venue is:

ULB Campus Solbosch 50, Av. Franklin D. Roosevelt 1050 Bruxelles

The location where taxis expect to pick you up is marked on the map on the back cover.

FREE SHUTTLE BUSES

On Sunday afternoon, FOSDEM provides a free shuttle bus service from the conference venue to Brussels South (Midi) railway station which has a regular service to many popular destinations within Belgium and to surrounding countries. Three buses will run at roughly 20-minute intervals from Av. Buyl. The journey takes approximately 20 minutes. Based on previous experience, we expect the buses to be busiest from 17:30 on. The first bus leaves at 15:30. The last departure will be at 19:30. If you don't want to queue, why not leave later? There are plenty of bars in the neighbourhood where you can pass the time!

KEYSIGNING

The keysigning will take place on Sunday at 14:00 in the corridor on the second level of the U building. Please bring the printed and verified list, a pen, and appropriate form of identification with you to FOSDEM. Be on time! Please be sure to complete your signing homework before Monday, 30 April 2018, and upload new signatures on your keys to a well-connected keyserver.

BOF ROOMS

Small and cosy rooms intended for ad-hoc discussions, meet-ups, or brainstorming sessions. Each seats approximately thirty people. There is deliberately no projector or recording equipment. Reservations are made on a first-come, first-served basis. Signup sheets are available at the infodesk in building H. Directions to the rooms can also be obtained there.

HACKER ROOM

Need a break? Want to spend some quiet time coding? Need to recharge yourself and/or your devices? There is a hacker room where you can sit back and do all that. The hacker room is H.2111 in the upper H building.

ANNOUNCEMENT CORNER

This is the place to be for all sorts of announcements, including adverts

and leaflets of software releases, community projects, and so on. Adverts may not be placed anywhere else on campus! Handing out flyers is likewise not allowed. In the "job corner" section, information on employment or contracting opportunities can be found. The corner is in the upper H building. Some common sense rules apply. Everything must be related to FOSS. If in doubt, ask a member of staff.

DEVELOPER ROOMS

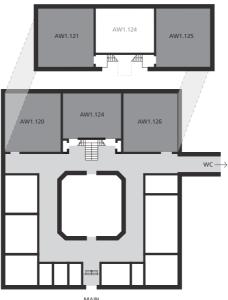
Developer rooms are are assigned to self-organising groups to work together on open source projects, to discuss topics relevant to a broader subset of the community, etc.

Saturday		Sunday	
Project	Room	Project	Room
Ada	AW1.125	Config Management	UA2.114
BSD	K.3.401	Containers	UD2.120
CAD and Open Hardware	K.4.201	Decentralised Internet & Privacy	H.1301
Community	K.4.601	Distributions	K.3.201
Debugging tools	AW1.121	DNS Retrocomputing	AW1.121
Embedded, mobile and automotive	UD2.218A	Embedded, mobile and automotive	UB2.252A
Free Java	UD2.208	Geospatial	AW1.126
Go	H.1308	Hardware Enablement	K.4.401
Graph Processing	H.2214	HPC, Big Data and Data Science	H.1302
Graphics	K.4.401	Internet of Things	AW1.125
Identity and Access Management	UD2.119	Legal and Policy Issues	UA2.220
Microkernels	AW1.126	LLVM Toolchain	K.3.401
Monitoring & Cloud	UD2.120	MySQL and Friends	H.1308
Mozilla	UA2.118	Open Source Design	K.4.201
Open Document Editors	AW1.120	Perl Programming Languages	K.4.601
Open Media	H.1309	Real Time Communications (RTC)	H.1309
Package Management	K.3.201	Rust	H.2214
PostgreSQL	H.1302	Software Defined Radio	AW1.120
SDN & NFV	H.1301	Software Defined Storage	H.2213
Testing & Automation	H.2213	Source Code Analysis, Tool the Docs	UD2.119
Virtualisation and laaS	UB2.252A	Virtualisation and laaS	UD2.218A

STANDS

Building AW	Building K - level 1	Building K - level 2
Automotive Grade Linux	Bazel	0 A.D.
EOMA68	CentOS	CiviCRM
Ham radio	Ceph	coala
Libre Space Foundation	Debian	Eclipse Foundation
MicroPython	Fedora Project	Free Linux Foundation Training
OpenEmbedded	Foreman	GitMate
Pine64 ARMv8 Devices	Free Software Foundation Europe (FSFE)	Godot Engine
RIOT	FreeBSD Project	Google Summer of Code, GCI
Turris Omnia	Gentoo	Jenkins
Building H	Gluster	Kopano
Grafana	GNOME	Mozilla
Graphite	GRUB	MuseScore
GrimoireLab	Haiku	Nim
O'Reilly Media	KDE	OW2 Open Source Community
OWASP	illumos	Perl Programming Language
Percona	LibreOffice	PostgreSQL
privacyIDEA	LizardFS	The Apache Software Foundation
Prometheus	Nextcloud	The Realtime Lounge
Software Freedom Conservancy	Nos oignons	VideoLAN
WolfSSL	Open Source Design	Wikis and CMS
	Open Source Initiative	
	OpenStack	
	openSUSE	
	oVirt	
	ownCloud	
	Python	
	Qubes OS	
	ReactOS	
	SecureDrop	
	Tor Project	
	Vikings - Libre Hosting	
	Xen Project	

BUILDING AW

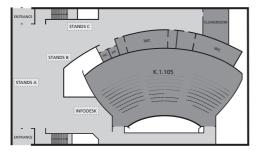


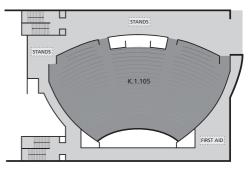
MAIN ENTRANCE

Developer rooms: Saturday		Developer rooms: Sunday	
Project	Room	Project	Room
Open Document Editors	AW1.120	Software Defined Radio	AW1.120
Debugging tools	AW1.121	DNS Retrocomputing	AW1.121
Ada	AW1.125	Internet of Things	AW1.125
Microkernels	AW1.126	Geospatial	AW1.126

Stands		
Automotive Grade Linux	OpenEmbedded	
EOMA68	Pine64 ARMv8 Devices	
Ham radio	RIOT	
Libre Space Foundation	Turris Omnia	
MicroPython		

BUILDING K - LEVEL 1



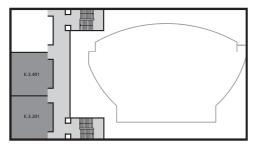


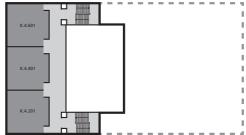
Main tracks: Saturday	Main tracks: Sunday
Miscellaneous	Community
Python	Miscellaneous

	Stands	
Bazel	GRUB	openSUSE
CentOS	Haiku	oVirt
Ceph	KDE	ownCloud
Debian	illumos	Python
Fedora Project	LibreOffice	Qubes OS
Foreman	LizardFS	ReactOS
Free Software Foundation Europe (FSFE)	Nextcloud	SecureDrop
FreeBSD Project	Nos oignons	Tor Project
Gentoo	Open Source Design	Vikings - Libre Hosting
Gluster	Open Source Initiative	Xen Project
GNOME	OpenStack	

BUILDING K - LEVEL 2

The stands are on level 2 of K building

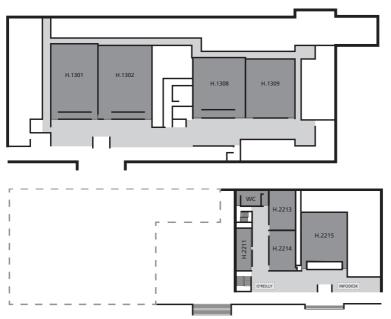




Developer rooms: Saturday		Developer rooms: Sunday	
Project	Room	Project	Room
Package Management	K.3.201	Distributions	K.3.201
BSD	K.3.401	LLVM Toolchain	K.3.401
CAD and Open Hardware	K.4.201	Open Source Design	K.4.201
Graphics	K.4.401	Hardware Enablement	K.4.401
Community	K.4.601	Perl Programming Languages	K.4.601

	Stands	
0 A.D.	Kopano	VideoLAN
CiviCRM	Mozilla	Wikis and CMS
coala	MuseScore	
Eclipse Foundation	Nim	
Free Linux Foundation Training	OW2 Open Source Community	
GitMate	Perl Programming Language	
Godot Engine	PostgreSQL	
Google Summer of Code, GCI	The Apache Software Foundation	
Jenkins	The Realtime Lounge	

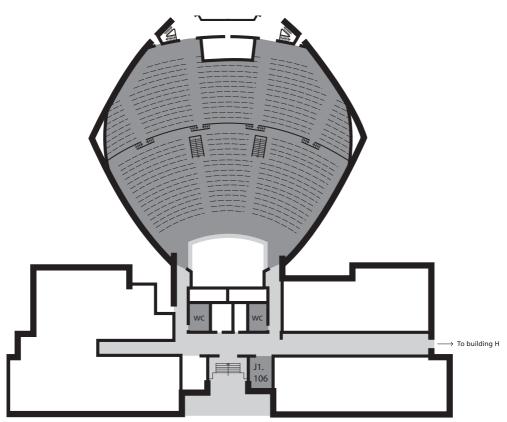
BUILDING H



Developer rooms: Saturday		Developer rooms: Sunday	
Project	Room	Project	Room
SDN & NFV	H.1301	Decentralised Internet & Privacy	H.1301
PostgreSQL	H.1302	HPC, Big Data and Data Science	H.1302
Go	H.1308	MySQL and Friends	H.1308
Open Media	H.1309	Real Time Communications (RTC)	H.1309
Testing & Automation	H.2213	Software Defined Storage	H.2213
Graph Processing	H.2214	Rust	H.2214
Lightning talks	H.2215	Lightning talks	H.2215

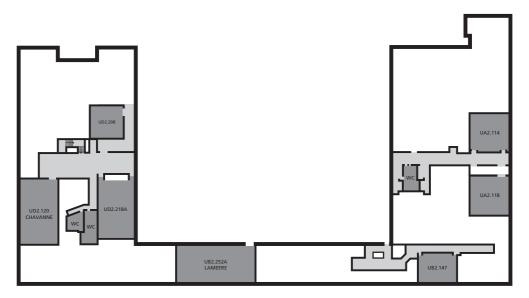
Stands		
Grafana	OWASP	Software Freedom Conservancy
Graphite	Percona	WolfSSL
GrimoireLab	privacyIDEA	
O'Reilly Media	Prometheus	

BUILDING J



Main tracks: Saturday	Main tracks: Sunday
Keynotes	Keynotes
History	Security and Encryption
Performance	Space

BUILDING U



Developer rooms: Saturday		Developer rooms: Sunday	
Project	Room	Project	Room
Mozilla	UA2.118	Config Management	UA2.114
Virtualisation and laaS	UB2.252A	Legal and Policy Issues	UA2.220
Monitoring & Cloud	UD2.120	Embedded, mobile and automotive	UB2.252A
Free Java	UD2.208	Containers	UD2.120
Embedded, mobile and automotive	UD2.218A	Virtualisation and laaS	UD2.218A
Identity and Access Management	UD2.119	Source Code Analysis, Tool the Docs	UD2.119

CORNERSTONE SPONSORS

Google

Google's innovative search technologies connect millions of people around the world with information every day. Founded in 1998 by Stanford Ph.D. students Larry Page and Sergey Brin, Google today is a top web property in all major global markets. Google's targeted advertising program, which is the largest and fastest growing in the industry, provides businesses of all sizes with measurable results, while enhancing the overall web experience for users. Google is headquartered in Silicon Valley with offices throughout North America, Europe, and Asia.

Google supports the event financially.



Learn more at www.google.com



Red Hat is the world's leading provider of open source software solutions, using a community-powered approach to reliable and high-performing cloud, Linux, middleware, storage and virtualization technologies. Red Hat also offers awardwinning support, training, and consulting services. As the connective hub in a global network of enterprises, partners, and open source communities, Red Hat helps create relevant, innovative technologies that liberate resources for growth and prepare customers for the future of IT.



Red Hat supports the event financially.

Learn more at www.redhat.com

MAIN SPONSORS



For 11 years, Amazon Web Services has been the world's most comprehensive and broadly adopted cloud platform. AWS offers over 90 fully featured services for compute, storage, networking, database, analytics, application services, deployment, management, developer, mobile, Internet of Things (IoT), Artificial Intelligence (AI), security, hybrid and enterprise applications, from 42 Availability Zones (AZs) across 16 geographic regions in the U.S., Australia, Brazil, Canada, China, Germany, India, Ireland, Japan, Korea, Singapore, and the UK. AWS services are trusted by millions of active customers around the world monthly -- including the fastest growing startups, largest enterprises, and leading government agencies -- to power their infrastructure, make them more agile, and lower costs.



AWS supports the event financially. 📸 Learn more about AWS, visit https://aws.amazon.com

. CISCO

Cisco enables people to make powerful connections - whether in business, education, philanthropy, or creativity. Cisco hardware, software, and service offerings are used to

create the Internet solutions that make networks possible - providing easy access to information anywhere, at any time. Cisco was founded in 1984 by a small group of computer scientists from Stanford University. Since the company's inception, Cisco engineers have been leaders in the development of Internet Protocol (IP)-based networking technologies. Today, with more than 67,000 employees worldwide, this tradition of innovation continues with industryleading products and solutions in the company's core development areas of routing and switching, as well as in advanced technologies such as Application Networking, Data Center, Digital Media, IPICS, Mobility, Security, Storage Networking, TelePresence, Unified Communications, Video and Virtualization.

- Cisco provides all of our WLAN hardware and helps us setting up the wireless network.
- C Learn more at www.cisco.com

CLOUD NATIVE COMPUTING FOUNDATION

The Cloud Native Computing

Foundation (CNCF) will harmonize emerging technologies and foster innovation in container packaged, dynamically scheduled, and microservices based application development and operations. The mission of the CNCF is to create and drive the adoption of a new computing paradigm that is optimized for modern distributed systems environments capable of scaling to tens of thousands of self healing multi-tenant nodes.



The Cloud Native Computing Foundation (CNCF) supports the event financially.



C Learn more at www.cncf.io.



Codethink specialises in systemlevel software engineering to enable advanced technical applications, working across a range of industries including finance, automotive, telecoms and medical. As experts in Free and Open Source Software, they help customers take maximum advantage of the knowledge and technologies developed by the Open Source community. Their customers are international-scale organizations who seek competitive edge through design of enterprise appliances and embedded systems which are faster, smaller, more secure, more up-to-date, or more advanced than their competitors.

- Codethink supports the event financially.
- D Learn more at www.codethink.co.uk

COLLABORA

Collabora is a leading global consultancy specializing in delivering the benefits of Open Source software to the commercial world. For over 12 years, we've helped clients navigate the ever-evolving world of Open Source, enabling them to develop

the best solutions - whether writing a line of code or shaping a longer-term strategic software development plan. By harnessing the potential of communitydriven Open Source projects, and reusing existing components, we help our clients reduce time to market and focus on creating product differentiation.

💍 Collabora supports the event financially.

C Learn more at collabora.com

Collabora Follow us on Twitter @Collabora

colt

Colt provides network, voice, and data centre services to thousands of businesses around the world.

allowing them to focus on delivering their business goals instead of the underlying infrastructure. Customers include 18 of the top 25 banks and diversified financial groups and 19 out of the top 25 companies in both global media and telecoms industries (Forbes 2000 list, 2014). In addition, Colt works with over 50 exchange venues and 13 European central banks. Colt operates across Europe, Asia and North America with connections into over 200 cities globally. It completed the acquisition of KVH in 2014, an integrated managed communications and IT infrastructure services business, with headquarters in Tokyo and operations in Hong Kong, Seoul and Singapore.

🐞 Colt sponsors the internet uplink at FOSDEM.



Minio is an AWS S3 compatible, open source, object storage server, written in Go. Consistent S3 API with freedom of deployment on variety of platforms, makes Minio an ideal multi-cloud storage platform. Developers generally deploy Minio in a container and consume storage services. While scaling Minio via platforms like Kubernetes and Docker Swarm.



🎢 Minio supports the event financially.



🐞 Join us on slack.minio.io

O'REILLY®

Once again, we are proud to have O'Reilly as one of our sponsors. O'Reilly are the premier information source for leading-edge computer technologies and communicate the knowledge of experts through books, conferences, and web sites. Their books, sporting the iconic animals on the covers, occupy a treasured place on the shelves of the developers building the next generation of software. Their conferences and summits bring innovators together to shape the revolutionary ideas that spark new industries. From the Internet to the web, Linux, Open Source, and now peer-to-peer networking, O'Reilly puts technologies on the map.



Qwont

Designed and developed in France, Qwant is the first European search engine with its own indexing technology, which protects the privacy of its users by refusing all tracking devices, including for advertising. Contrary to the main search engines on the market, Qwant does not install cookies on the user browser.

does not want to know who the user is or what he/she does, and does not keep individual logs of user queries. Qwant's friendly interface allows users to find answers efficiently from the Web and social networks. It respects neutrality.

O'Reilly supports the event financially.

Learn more at www.oreilly.com



The Université Libre de Bruxelles

The Université Libre de Bruxelles (or ULB) is a French-speaking university in Brussels, Belgium. It has about 20,000 students. The ULB very substantially supports the event by providing us with the location as well as infrastructure on-site.

Learn more at www.ulb.ac.be

Qwant considers all indexed websites and services with no discrimination, without altering the ranking of results according to its own interests. Founded in 2013 by Eric Leandri, Jean-Manuel Rozan, Alberto Chalon and the Pertimm company, Qwant SAS has offices in Paris, Nice, Rouen, Ajaccio, Milan and Berlin.

Qwant supports the event financially.

Dearn more at www.qwant.com

trivago

trivago is a global hotel search platform. We are focused on reshaping the way travelers search for and compare hotels, while enabling hotel advertisers to grow their businesses. Our search platform makes sense of a complex, fragmented web of online hotel offerings in a comprehensive way, by aggregating information from a deep supply of hotels and websites. trivago provides access to over 1.8m hotels, including vacation rentals and alternative accommodations, with prices and availability from over 400+ booking sites and hotel chains.

trivago is a place where we take pride in learning from one another. We love what we do but we don't take ourselves too seriously— we make mistakes, but the drive to continually improve is something we all possess.

Our tech stack:

- Highly modern JavaScript, including Jest, Snapshot testing, Redux, webpack, Rollup and of course ES6+
- PHP and Symfony at their best, running on handmade FreeBSD servers
- node.js in the cloud
- Storage systems: Percona MySQL, Cassandra, Redis, Memcached and Varnish
- Big Data" areas: Java, Hadoop, Kafka, Stream processing, Big data analytics

We are big supporters of Open Source and contribute back whenever possible.

- trivago supports the event financially.
- Curious? Visit our tech blog! tech.trivago.com

A SPECIAL Thanks to ...!

Cercle Informatique, ULB

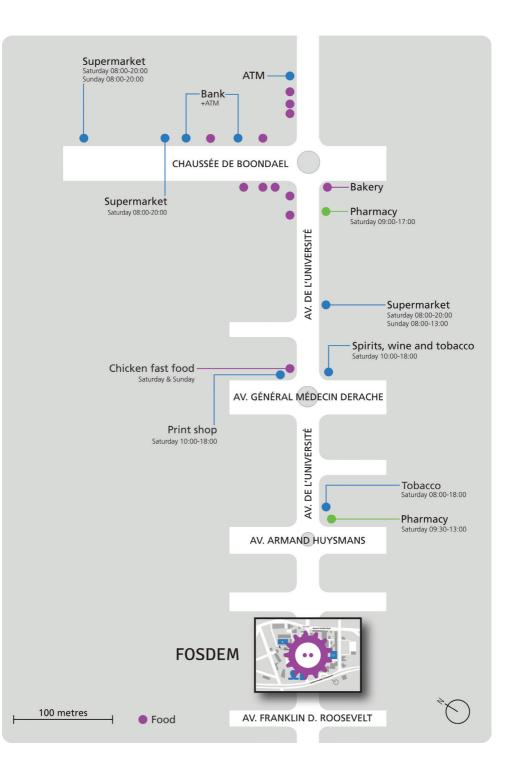
The "Cercle Informatique ULB" is a group of students who help us book ULB rooms for use during FOSDEM. They also provide part of the catering during the event, the proceeds of which go towards funding their own academic activities.

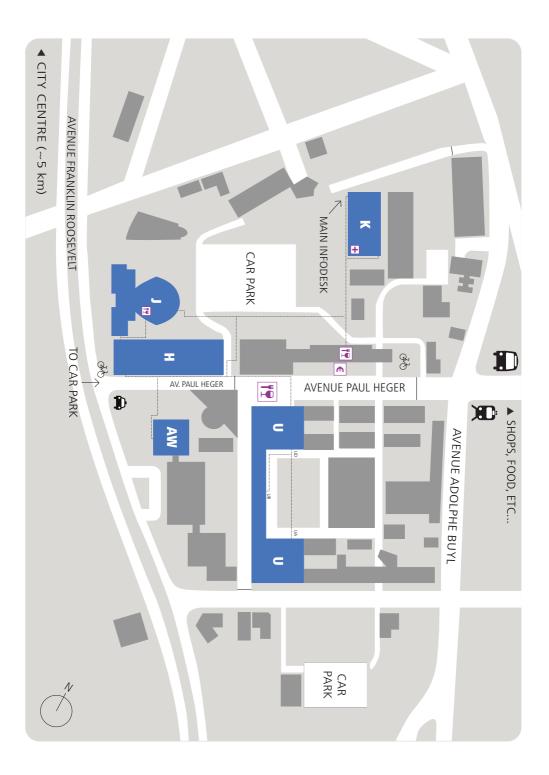
The **FOSDEM Team** spends a lot of free time throughout the year organising this great event. Without them there would be no FOSDEM.

HELP US MAKE Fosdem Better

Tear off this page and drop it in the feedback box at the Infodesk on your way out. Alternatively, send email to **feedback@fosdem.org** if you prefer to keep your booklet intact.

You can also give feedback on any individual talk by following the link near the bottom of its page in the online schedule at **fosdem.org/schedule/**





SEE YOU NEXT YEAR