What we do at Siemens...
We commute in cars designed with Siemens software...

... built in factories running on Siemens automation ...

... and charged by a Siemens smart grid.
We work in smart buildings that promote our health and safety... 

... that use energy with maximum efficiency...

... and connect the physical and the digital workplace.
We book our train tickets with Siemens software … … to travel on trains made by Siemens … … operated with Siemens infrastructure technology.
We rely on life-saving drugs and treatments…

... as well as accurate medical diagnoses, ...

... all of which are made possible by Siemens solutions.
Products consist of 0% - 99% Open Source
Maturity for Open Source adoption – Think about the level you need!

Guidance and further Information can be found on:

- [https://www.linuxfoundation.org/resources/open-source-guides](https://www.linuxfoundation.org/resources/open-source-guides)
- [https://todogroup.org/](https://todogroup.org/)
- [https://opensource.guide/](https://opensource.guide/)
- [https://spdx.dev/](https://spdx.dev/)
- [https://opensource.mercedes-benz.com/manifesto/](https://opensource.mercedes-benz.com/manifesto/)
- [bitkom Open-Source-Leitfaden](https://bitkom.org/)

Image Source: [https://debricked.com/blog/reaching-higher-levels-open-source-maturity/](https://debricked.com/blog/reaching-higher-levels-open-source-maturity/)
Establish an Open Source Culture
Social coding platform to collaborate on code within minutes.

Everything started with one Like

Attached is the variant analysis we did for CCP@BT, so you can see our goals we had in mind.

Key Requirements:
Main focus for this evaluation is managing source code for Linux Kernel and U-boot and collaboration. Most of our core components such as Linux, U-Boot and OpenEmbedded are using git as their source control. Otherwise, we will not be able to manage history and code changes.
Social coding platforms do provide an additional layer on top of git to simplify forking, merging, pull requests, etc. To use ATOS infrastructure with a provided "must use" Red Hat Enterprise Linux, it was agreed to use GitLab.
Of course, I would prefer a Siemens solution, e.g., https://code.siemens.com/

However, I was unable to wait for this. I'm sure we will have this one day and then I will say "we are a state-of-the-art software company".

BT-CCP-S-0007, DAR_Configuration_Management.pdf
Jun 11, 2014 at 11:45 am 1 like

Jaime R. Garza: Thanks! I just registered code.siemens.com, so if the idea gets central sponsorship,...
• Strong collaborative mindset, **cross silo thinkers**
• **Full Stack Engineers** (Architecture, Development, etc.)
• Experience as **Open Source contributor or maintainer**
• The platform itself is used to build the platform

Team Charter of code.siemens.com
Internal projects
- + 8,824 (+34%)

2022: 34,437
2021: 25,613

Internal community with 6,330 active people

105 active organizations from 76 countries

Merge requests
+ 4,416,999 (+37%)

2022: 1,627,078
2021: 1,185,379

Build pipelines
+ 3,970,275 (+44%)

• 2022: 12,973,311
• 2021: 9,003,036

Users
- + 17,183 users (+47%)

2022: 54,036
2021: 36,853

Core team consists of 12 people with origin from 8 countries and different BUs

Open Source only, 0€ license fees

Users
- + 17,183 users (+47%)

2022: 54,036
2021: 36,853

Core team consists of 12 people with origin from 8 countries and different BUs

Open Source only, 0€ license fees
Upstream first - no patches

> 300 merge requests to GitLab
10 elections as GitLab MVP (most valuable person) within the crew

The code.siemens.com crew members are well known within the external and internal communities.
No help desk

Great engagement within the community via issue tracker, internal social network and extensive documentation

- Documentation as Code
- Self-service whenever possible, e.g., people create a merge request

From MailOps and TicketOps towards Company as Code
### 65 Ambassadors

Search through all ambassadors:

<table>
<thead>
<tr>
<th>Community IDs</th>
<th>Avatar</th>
<th>Nickname</th>
</tr>
</thead>
<tbody>
<tr>
<td>code siemens.com</td>
<td><img src="image1" alt="Avatar" /></td>
<td>User 1</td>
</tr>
<tr>
<td>github.com</td>
<td><img src="image2" alt="Avatar" /></td>
<td>User 2</td>
</tr>
<tr>
<td>openHub</td>
<td><img src="image3" alt="Avatar" /></td>
<td>User 3</td>
</tr>
<tr>
<td>Apache</td>
<td><img src="image4" alt="Avatar" /></td>
<td>User 4</td>
</tr>
</tbody>
</table>

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### Docs

**docs(ambassadors): add as ambassador**

- **Requested to merge** (removed): docs/new-ambassadors
- **Info** | **Rev.** | **Date** | **Time**
- **Hey everyone!**
- **Starting my 6th year in the company, I wanted to dive a bit more in to the deep regarding the code.siemens.com. So far I’ve used the platform quite...**
- **Review by admission team**
- **Add new ambassador to “Ambassadors of code.siemens.com” in Teams**
- **Add new ambassador to Outlook meeting invitations (TuWe series)**

**Edited** By: August 3, 2022, 9:48 PM

- **Merge request pipeline #15685395** passed for (09:49 AM) August 3, 2022
- **Approved by (user)**
- **Test summary contained no changed test results null**
- **Merged by (user)**
- **Pipeline #15685395** passed for tz96c4d4, Aug 3, 2022, 9:50 PM
Huge applause to the code.siemens.com community!
I can only encourage everyone to join this awesome network that opens new opportunities for all of us in terms of innovation.
Siemens Open Source activities
Open Source by Siemens

You'll find a growing list of projects published by Siemens that you can explore below.

Head over to 🔄 github.com/siemens for a more complete list!

On top of our core GitHub organization, you'll find projects hosted at some of our product-specific organizations (for example github.com/mindsphere and github.com/industrial-edge) and at gitlab.com/siemens.
Open Source event

https://opensource.siemens.com/events/2023/#call-for-speakers
Product Development, HVAC Products Siemens Switzerland Ltd (Building Technologies Group, International Headquarters), Switzerland

We are developing products for building automation on our development workstations running "Debian sarge". There's also a server with a MoinMoin-Wiki running "Debian sarge".

The high quality and stability with Debian is just great! The availability of software updates and security bugfixes is outstanding. Another reason to use Debian is the quantity of available software packages.

We use many packages which are not available in other GNU/Linux distributions (e.g. iodetool, mtz-tools, diamav, tssocks). With Debian we can get every package we need, just by using apt-get with it's "super cow power".

Siemens

Siemens is using Debian in several areas including R&D, infrastructure, products, and solutions.

Debian is used as the basis of many of our products and services in automation and digitalization of process and manufacturing industries, smart mobility solutions for road and rail, digital healthcare services and medical technology as well as distributed energy systems and intelligent infrastructure for buildings.

Debian is for example embedded and part of Siemens MRI scanners, onboard modern Siemens train and metro systems, around tracks and train stations, and many more of our devices. Furthermore, Siemens is a founding member of the Civil Infrastructure Platform, using Debian LTS as its base layer.

It goes without saying that Debian is also an essential part of our server infrastructure. Our workstations and desktop machines often run Debian whenever Linux is required, e.g., most Linux based products within the building technology domain are developed on Debian. Siemens is also offering Debian-based embedded distributions, such as the Sokol™ Omni OS.

Why we stick with Debian: The high quality and stability we reach by using Debian is just great! and the availability of software updates and security fixes is outstanding, and the quantity of available software packages is amazing.
Growing number of upstream contributions: e.g., SIMATIC drivers within Linux Kernel

Siemens Working To Upstream More Linux Drivers For Their Industrial PCs

Written by Michael Lustad in Hardware on 15 March 2021 at 06:18 AM EST. 6 Comments

Siemens has recently been engaging directly with the upstream Linux kernel developers in aiming to mainstream various drivers for benefiting their industrial PC platforms.

For Siemens Industrial PCs like the SIMATIC IPC line-up, the German industrial giant is looking to begin upstreaming more of their drivers. The initial area includes watchdog and LED support for these ultra-high industrial PCs while more platform drivers and expanded device support is expected to come with time.

The targeted devices by the initial Linux patches include the SIMATIC IPC277E / IPC277E / IPC277E / IPC307E / IPC407E / IPC417E / IPC417E / IPC414V systems that range from mini-ITX computer to wall computer used for various industrial applications.

[86]: Enable SIMATIC_IPC wdt and leds as module
Developers as customers

Welcome to Industrial Edge Open Source Projects!

Industrial Edge is the open Industrial Edge Computing platform from Siemens and part of Siemens’ comprehensive Industrial IoT offering. Click on the badges below to find more Siemens open source projects:

Welcome Developers!

We believe digitalization is driven by developers, so we are opening Siemens Xcelerator for co-creation. Here you can build new digital solutions or enhance your existing applications with access to our APIs.

MindSphere Open Source Tools and Libraries

MindSphere Open Source Tools and Libraries are contributions from the MindSphere community. These are demo applications, libraries and SDKs and useful connectivity tools which are maintained and released as open source software. The source code for all libraries is available on Github and the packages can be downloaded via common package management tools.

Featured: MindSphere CLI

The MindSphere CLI is a powerful tool for MindSphere developers and administrators as it gives you scriptable access to common tasks in MindSphere.

It is packaged as part of @mindconnect/mindconnect-nodejs library. You can install it from npm or download binaries from the links below.

```
npm install -g @mindconnect/mindconnect-nodejs
```

Linux v3.20.0  macOS v3.20.0  Windows v3.20.0
Investments through Next47

Next47 works with start-ups who are using deep technologies such as artificial intelligence, augmented and virtual reality, cybersecurity, autonomous transportation, IoT, robotics, advanced manufacturing, AI-powered business applications, and automation technologies to solve industry’s most difficult and fundamental challenges.

Portfolio

15Five
AEVA
aforza
alaiko
Apollo
Armorblox
Bizzabo
blink
Summary
Open Source and Inner Source is collaborative software engineering culture.

Culture is people business!

Start with experienced Open Source developers, step-by-step, treat people nicely, be authentic and walk the talk!

Nobody is perfect, just mention e.g., "this is a prototype", this works on Open Source projects as well!
Questions?
Contact

Roger Meier
Principal Key Expert
Service Owner code.siemens.com
r.meier@siemens.com

https://opensource.siemens.com/