

Finding and Learning About Open Source Software

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Open Source is Everywhere

- **We all use it every day**
 - Linux, Firefox, WordPress, Libre Office, VLC, GIMP, Python, MySQL, Bitcoin, Ethereum
- **More than 90% of software products contain open source code**
- **Developers rely heavily on open source projects, including containers**
- **The world's most powerful servers run Linux**

People with Open Source Experience

- **Know about**
 - History of Open Source
 - GitHub
 - Open Source Foundations
 - Open Source Licenses (OSI)
 - Different Types of Open Source
 - OpenHub.net (Synopsys/Black Duck)
 - How to use and contribute to open source projects
 - How communities work

It's Not So Easy for Everyone Else

Even If You Found GitHub...

Explore Topics Trending Collections Events GitHub Sponsors

Get email updates

Here's what's popular on GitHub today...

Trending repository

 [klinix5 / InstallerFileTakeOver](#)

[Code](#) [Issues](#) [Pull requests](#)

Updated 10 hours ago C++

Trending repository

 [google / filament](#)

[Code](#) [Issues](#) [Pull requests](#) [Discussions](#)

[Open](#) [JavaScript Request: Expose Texture methods](#)  3
getWidth(), getHeight(), getDepth(), getLevels(), etc.

 BStringhamVRSK commented on Aug 12

Problem:
After using Engine.createTextureFromKtx/jpeg/Png, I need to query the texture width and height so I can generate proper UV coordinates for font display.

Trending developers

 Jan De Dobbeleer JanDeDobbeleer 
 Rich Harris Rich-Harris 
 Tomás Senart tsenart 
 07akioni 07akioni 

[See more trending developers >](#)

Key Problem

**People and Organizations Often
Have Difficulty Finding
Free and Open Source Software
that Meets their Needs**

Organizations are at Differing Levels of Maturity

- No familiarity with open source
 - Use of open source applications (License compliance)
 - Inclusion of open source in their applications
 - Contributing to open source projects
 - Releasing open source for use by others
 - Creating an internal Open Source Project Office (OSPO) to manage their open source efforts
- 
- Low
- High

Several Problems for Organizations

- Not considering open source options
- Not knowing where to look (alternativeto.net)
- Not knowing how to evaluate possible candidates
- Different types of open source software
- Not getting pre-sales support as with proprietary enterprise software
- Information overload on searches
- Unreliable third-party “best” lists

How Do People Evaluate Software?

- Previous experience
- Study reviews, both informal and professional
- Talk to sales person for vendor
- Follow organizational standard or mandate
- Participate in forum discussions
- Do a personal trial
- Ask a trusted friend or colleague
- Perform a detailed internal evaluation

How to find “worthy” open source projects?

- **What does it mean to be “worthy”?**
 - **Widespread use**
 - **Documentation, support, and training**
 - **Active project with timely response to issue reports?**
 - **Stable core team**
 - **Good fit to customer requirements**
 - **Standards compliance**
 - **Performance**
 - **Secure**
- **Innovative features**

Evaluating Proprietary vs. Open Source

- Enterprise commercial software has professional sales team to manage complex sale, formal trials, price negotiation
- Packaged commercial software often has published reviews, product road map, paid support
- Types of open source software
 - Vendor-led projects
 - Foundation-based projects
 - Community-based projects

Commercial open source projects

- **Closely resemble proprietary projects**
 - **Supported and community editions common**
 - **Available support and training**
 - **Vendor provides indemnification**
 - **In-house development team – everyone is paid**
 - **Product management with roadmap**
- **Often have community version and proprietary commercial version**

Foundation-based open source projects

- **Clustered projects sponsored by foundation**
 - Common license model
 - Many examples of independent commercial support for projects
 - Mix of paid and volunteer developers
 - Examples: Apache HTTP Server, Eclipse, LibreOffice

Community-based open source projects

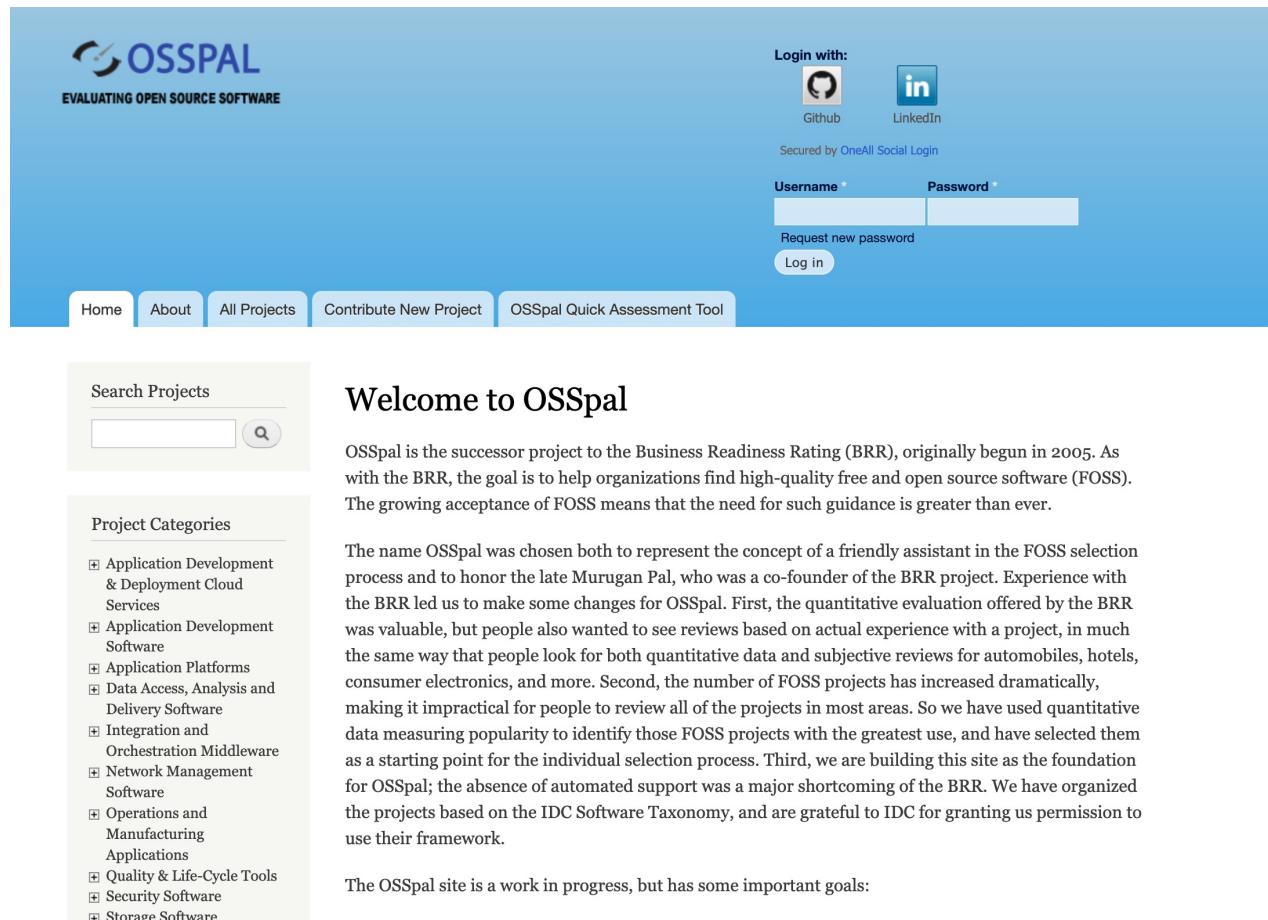
- “**Pure**” open source projects
 - Rely on volunteers with core team of committers to set direction
 - No sales or marketing team – “word of mouth”
 - Forum-based support
 - Occasional support and training from third parties
 - “It’s ready when it’s ready”
 - Hosted on public forges, mainly Github
 - Popular open source projects: scikit-learn, Shotcut, OBS

OSSpal Project

Helping People and Organizations find OSS

- Rebooted from Business Readiness Rating
- Focused on the way that people do evaluations
 - Quantitative vs. qualitative
 - Time-boxed evaluation period
 - May not be aware of best candidates
 - Heavy reliance on opinions of others
- Curated OSS projects by category (IDC taxonomy)
- Prioritized website development

OSSpal Home Page



The screenshot shows the OSSpal website homepage. At the top left is the logo "OSSPAL" with the tagline "EVALUATING OPEN SOURCE SOFTWARE". To the right is a "Login with:" section featuring "Github" and "LinkedIn" icons. Below that is a "Secured by OneAll Social Login" message. A "Log in" button is located at the bottom right of the login area. A navigation bar at the top includes links for "Home", "About", "All Projects", "Contribute New Project", and "OSSpal Quick Assessment Tool". On the left side, there's a "Search Projects" input field and a "Project Categories" sidebar with a list of software categories: Application Development & Deployment Cloud Services, Application Development Software, Application Platforms, Data Access, Analysis and Delivery Software, Integration and Orchestration Middleware, Network Management Software, Operations and Manufacturing Applications, Quality & Life-Cycle Tools, Security Software, and Storage Software. The main content area features a "Welcome to OSSpal" heading and a paragraph explaining the project's history and goals. It also mentions the IDC Software Taxonomy and automated support.

Welcome to OSSpal

OSSpal is the successor project to the Business Readiness Rating (BRR), originally begun in 2005. As with the BRR, the goal is to help organizations find high-quality free and open source software (FOSS). The growing acceptance of FOSS means that the need for such guidance is greater than ever.

The name OSSpal was chosen both to represent the concept of a friendly assistant in the FOSS selection process and to honor the late Murugan Pal, who was a co-founder of the BRR project. Experience with the BRR led us to make some changes for OSSpal. First, the quantitative evaluation offered by the BRR was valuable, but people also wanted to see reviews based on actual experience with a project, in much the same way that people look for both quantitative data and subjective reviews for automobiles, hotels, consumer electronics, and more. Second, the number of FOSS projects has increased dramatically, making it impractical for people to review all of the projects in most areas. So we have used quantitative data measuring popularity to identify those FOSS projects with the greatest use, and have selected them as a starting point for the individual selection process. Third, we are building this site as the foundation for OSSpal; the absence of automated support was a major shortcoming of the BRR. We have organized the projects based on the IDC Software Taxonomy, and are grateful to IDC for granting us permission to use their framework.

The OSSpal site is a work in progress, but has some important goals:

Evaluation Categories for Open Source Software

- **Functionality**
- **Operational software characteristics**
 - Reliability, scalability, performance, usability, security
 - Architecture and code quality
- **Support and service**
- **Documentation**
- ***Project management***
 - Leadership, project data
- ***Adoption and community***
- ***Development process***

Evaluating OSS or all software products?

- Companies want/need help in selecting software
- Value to both objective and subjective information
- What are comparable metrics for open source and proprietary software?

Customers evaluate differently today

- Ten years ago: separate camps for proprietary and open source
- Today: find the best solution
 - Proprietary onsite
 - Proprietary hosted (SaaS/cloud)
 - Open source onsite
 - Open source hosted (SaaS/cloud)
- Most organizations now have a mix of these

OSSpal Development Environments Page

Development Environments

[View](#)

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IDLE

Submitted by willQian on Fri, 12/02/2016 - 14:40

IDLE, an acronym of "Integrated DeveLopment Environment", is a Python development environment that often comes bundled with Python distributions.

It has a Python Shell Window, which gives you access to the Python interactive mode. Its File Editor lets you create new or browse through and edit existing Python source files. There is a Path Browser for searching through the path of available module source files as well as a simple Class Browser for finding the methods of classes.

[Read more](#)

Microsoft Visual Studio Express

Submitted by willQian on Fri, 12/02/2016 - 14:36

Microsoft Visual Studio Express is a set of integrated development environments (IDEs) developed by Microsoft as a freeware and registerware[3] function-limited version of the non-free Microsoft Visual Studio. Express editions started with Visual Studio 2005.

[Read more](#)

Electron

qx's picture Submitted by qx on Thu, 10/13/2016 - 13:13

If you can build a website, you can build a desktop app. Electron is a framework for creating native applications with web technologies like JavaScript, HTML, and CSS. It takes care of the hard parts so you can focus on the core of your application. It is based on Node.js and Chromium and is used by the Atom editor and many other apps.

[Read more](#)

Header for Electron Page

Electron

[View](#) [Edit](#) [Comment](#)

gr's picture Submitted by gr on Thu, 10/13/2016 - 12:13
Homepage url: <http://electron.atom.io/>
Download url: <https://github.com/electron/electron>
Openhub url: https://www.openhub.net/p/Electron_framework

▼ Features Rating Results

Generic Features Rating Results	
Installability	☆☆☆☆☆ No votes yet
Usability	☆☆☆☆☆ No votes yet
Robustness	☆☆☆☆☆ No votes yet
Security	☆☆☆☆☆ No votes yet
Scalability	☆☆☆☆☆ No votes yet
Overall Quality	☆☆☆☆☆ No votes yet

Specific Features Rating Results

Plugin Support	☆☆☆☆☆ No votes yet
Language Support	☆☆☆☆☆ No votes yet
Visual Programming	☆☆☆☆☆ No votes yet
Cross Platform Support	☆☆☆☆☆ No votes yet

Description:

If you can build a website, you can build a desktop app. Electron is a framework for creating native applications with web technologies like JavaScript, HTML, and CSS. It takes care of the hard parts so you can focus on the core of your application. It is based on Node.js and Chromium and is used by the Atom editor and many other apps.

Tags:
[javascript](#)

Category:
[Application Development Software](#) [Development Languages, Environments & Tools](#) [Development Environments](#)

Individual Evaluation Form for Electron

Add new comment

Your name tonyw

▼ Features rating

▼ Generic Features Rating

Installability	☆☆☆☆☆
Usability	☆☆☆☆☆
Robustness	☆☆☆☆☆
Security	☆☆☆☆☆
Scalability	☆☆☆☆☆
Overall Quality	☆☆☆☆☆

▼ Specific Features Rating

Plugin Support	☆☆☆☆☆
Language Support	☆☆☆☆☆
Visual Programming	☆☆☆☆☆
Cross Platform Support	☆☆☆☆☆

Subject

Comment *

Text format Filtered HTML 

More information about text formats 

* Web page addresses and e-mail addresses turn into links automatically.
* Allowed HTML tags: <a>
 <div> <table> <tr> <td>

Other Directories of Open Source Software

- **Free Software Directory (FSF)**
 - directory.fsf.org
- **Open Source Software Directory**
 - opensourcesoftwaredirectory.com
- **Postmake (postmake.io) – Developer-focused**

What Should One Know to be an OSS Expert?

- **History and Definitions**
- **Organizations and Foundations Supporting OSS**
- **Popular Applications and Libraries**
- **Development Processes**
- **Community Management**
- **Licensing**
- **Business and Commercial Aspects**
- **Managing OSS in a Company**

How and Where Does One Learn about Open Source Software?

Education about Open Source

- **Many courses on specific OSS applications**
 - Commercial and foundation-based
 - Product-specific courses from vendors
 - Various courses on edX, Udemy, Coursera, Skillshare
- **University Programs**
 - Limited number of degree and certificate programs
 - Brandeis University certificate program (OSTM)
- **Very few organized curricula**
- **Guide to Free and Open Source Education**
 - opensource.com/education/13/4/guide-open-source-education

FLOSSbok

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FLOSSbok is aimed at providing comprehensive information about open source software that can allow its users to find a wide variety of materials related to various aspects of open source development and use.



Click to start reading the book...

Carnegie Mellon University Silicon Valley

Leading Conferences on Open Source

- **Open Source Summit (Linux Foundation)**
- **Open Source India (EFY)**
- **Linux.conf.au (Australia)**
- **Open Source Experience (France)**
- **GitHub Universe**
- **Int'l Conf. on Open Source Systems – research focus**

Other Learning Resources

- **opensource.com (IBM/RedHat)**
- **TODO Group (Linux Foundation)**
 - Best open source practices for companies
 - todogroup.org/guides/
- **Open Source Project Office 101**
 - github.com/todogroup/ospo101

Some Parting Thoughts

- **Using open source is a practical and business choice**
- **Open source and proprietary software can coexist**
- **Some software is called “open” but doesn’t comply with the Open Source Definition (opensource.org/osd)**
- **Don’t just use open source, but become part of a community**

Best wishes for the holidays and for a safe and healthy 2022!

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Golden Gate Bridge from Baker Beach