

OPEN SOURCE APPLICATION DEVELOPMENT PORTAL (OSADP)

The U.S. Department of Transportation (USDOT) developed the Open Source Application Development Portal (OSADP) to provide access to and support the collaboration, development, and use of mobility and transportation-related applications that are federally funded or approved. Together, the USDOT and OSADP facilitate the advancement of research, development, planning, testing, and deployment of connected vehicle and traveler-related applications and intelligent transportation systems (ITS).



The OSADP is a web-based portal that features source code, software, applications, and resources (e.g., documentation, licenses, data) to support the use of or further development of ITS-related applications. All applications developed under USDOT sponsorship are expected to make their source code and documentation available on the OSADP upon completion. Public agencies, service providers, application developers, researchers, and others are invited to visit and use the open-source applications, which are continually being added to the OSADP at http://itsforge.net.



Registered OSADP users can upload, download, and collaborate on open-source applications. All users have access to the frequently asked questions, discussion forums, and technical resources, as well as assistance in accessing and downloading the applications.

The USDOT launched OSADP 2.0 in February 2016 to raise stakeholder awareness of the portal's purpose, current content, and the development resources available to them.







www.itsforge.net

OSADP Releases

Recent Releases

- SmarTrAC
- CloudThink Motion Logger
- Automated Lane Change Software
- Prototype Operational Data Environment
- Pikalert Vehicle Data Translator

Future Releases

- Multi-Modal Intelligent Traffic Signal System
- Trajectory Converter Analysis 2.4



U.S. Department of Transportation



Providing Access

The OSADP offers the ability to:

- Search and download open-source ITS applications
 - Browse by application category
 - Search by keyword
- Find and use other resources (e.g., Q&As, related links, data on the Research Data Exchange)
- Learn about upcoming new releases
- Provide feedback on the OSADP
- Engage in forums to discuss applications under development and ideas for new applications.

Enabling Innovation

The OSADP enables users to:

- Download applications to support their research:
 - All applications are open source
 - Source code and documentation
- Re-use, modify, or enhance applications to meet needs
- Add their own software projects:
 - OSADP submission capability
 - GitHub testing platform.

All content is shared among registered OSADP users. The OSADP is open to adding any emerging open-source transportation application, both in development or complete.

Fostering Collaboration

The OSADP encourages dialog among users and developers to:

- Report bugs/fixes or ask questions about applications
- Discuss ideas for new transportation applications or technologies
- Share ideas on how to improve the OSADP
- Collaborate to enhance existing transportation applications
- Request the ability to collaborate on application improvements.

Other OSADP Resources

The OSADP provides additional resources such as:

- Release schedule for new applications
- Documents supporting applications:
 - Concept of operations, requirements, and design documents
 - Testing and evaluation documents
 - Data sets to support using applications
 - Resources to support installation and use of applications
- Frequently asked questions
- Process and instructions to add applications
- External web links:
 - Research Data Exchange
 - GitHub
 - Connected Vehicle Pilot Deployment
 - Connected Vehicle Reference Implementation Architecture

For a list of all posted and upcoming applications contained on the OSADP, please visit: http://www.itsforge.net/index.php/ open-source-release-schedule-menu.

OSADP Submission Process

- 1. Sign up for a Github account
- 2. Request upload access on OSADP
- 3. Have an open source license (Apache 2.0 preferred; others considered as requested)
- 4. Prepare and upload package to Github. Uploaded packages must include the following items:
 - Source code or assets
 - README.txt (provides brief summary of the open-source package)
 - RELEASE-NOTES.txt (describes incremental differences in and instructions for this release)
 - LICENSE.txt (provides the software license and associated terms and conditions)
 - ATTRIBUTION.txt (acknowledges individuals, groups, or organizations that have contributed to the software)
 - DOCUMENTATION (includes key project documents such as concept of operations, system requirements, user guides)

Additional information on this process and instructions are available in the Uploaders Guide: http://www.itsforge.net/ index.php/open-source-release-process-menu.

www.itsforge.net

For more information, please visit www.its.dot.gov or contact: **Kate Hartman**, Connected Vehicle Pilots Program Manager, ITS Joint Program Office

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