

# What is the RODS Open Source Project?

- Open source distribution of the Real-time Outbreak and Disease Surveillance System under the General Public License (GPL)
- The RODS System is NEDSS/PHIN-compliant software for building public health surveillance systems
- Originally developed by the RODS Laboratory, University of Pittsburgh
- Deployed in Pennsylvania, Utah, and Ohio. Ongoing deployments in New Jersey and Michigan.
- Used during the 2002 Winter Olympics

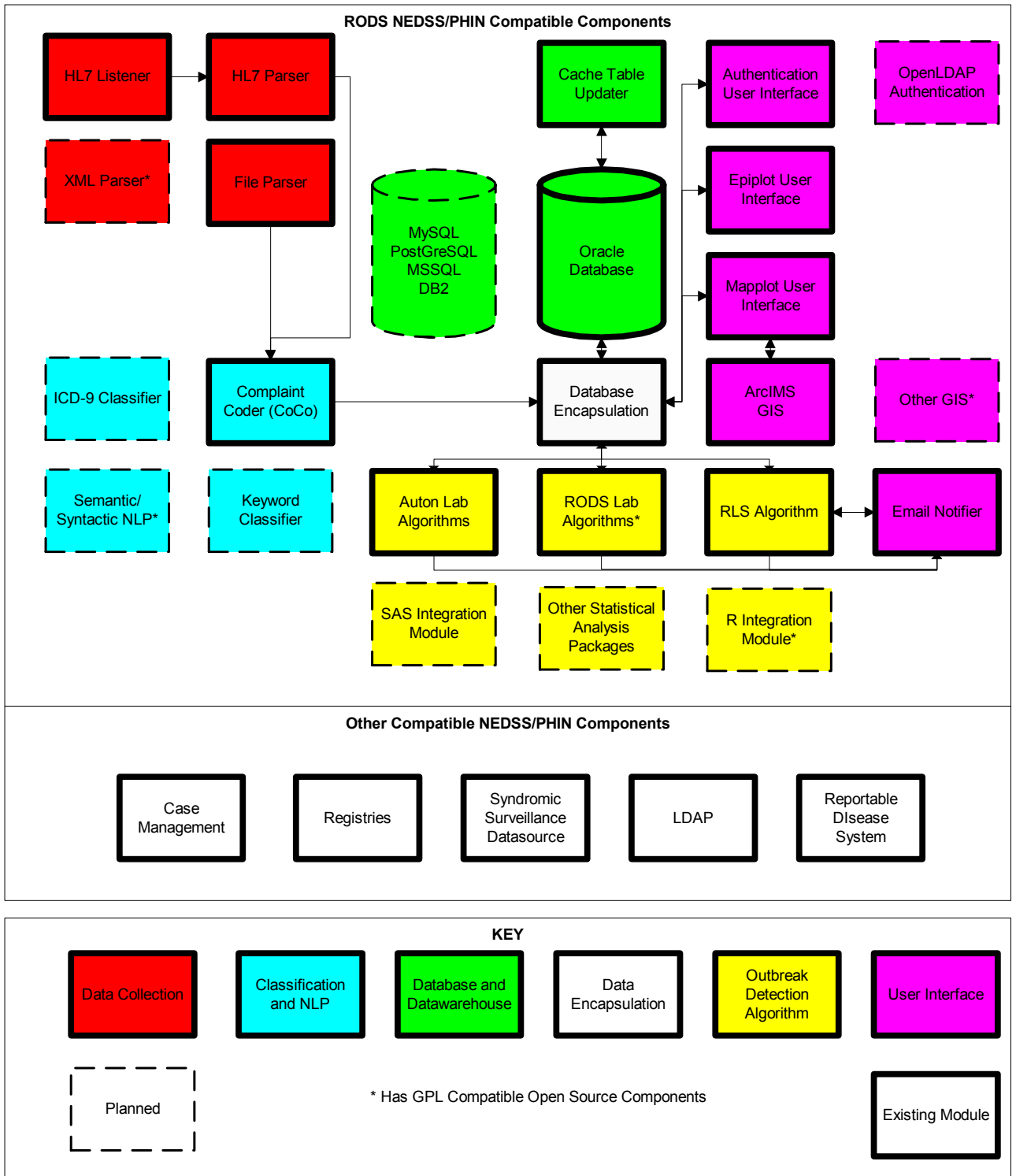
# Objectives of The RODS Open Source Project

- Accelerate the **deployment** of computer-based outbreak and disease surveillance systems
- Accelerate **development** and create the most innovative outbreak and disease surveillance software in existence
- Stimulate the formation of a **community** of developers, users, scientists, and supporters

# Why Open Source?

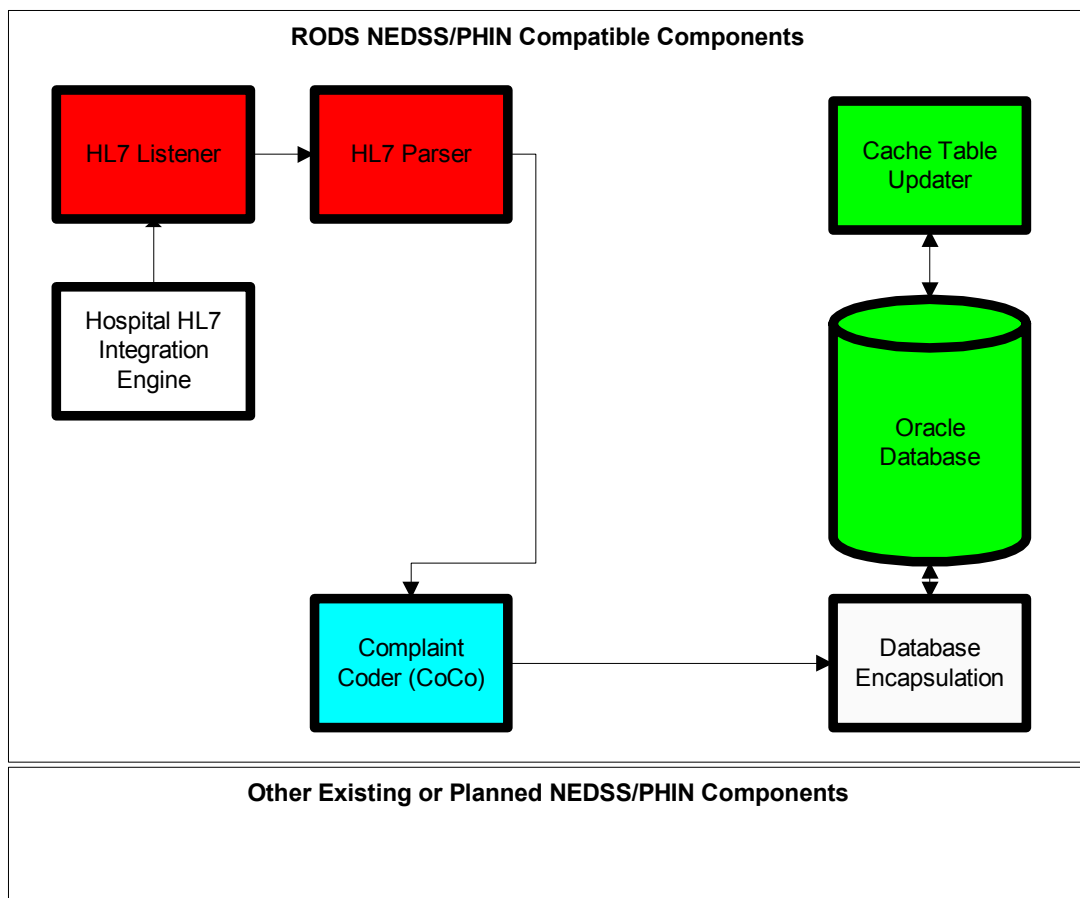
- LINUX
- Health departments requested source code
- Free use of software
- Freedom to customize the software to your needs
- Freedom to contribute to and use the innovations of others in the community
- Prevent vendor lock-in

# RODS Current and Planned Architecture



# How to Use RODS Software

The RODS system has modules that serve six major surveillance functions: *data collection, syndromic classification, data warehousing, database encapsulation, outbreak detection, and the user interface*. A subset of these modules can be used to perform a specific surveillance task such as collecting emergency room visit data in real time or all the modules can be used together to form a complete end-to-end disease outbreak and surveillance system.



Example of using a subset of RODS modules to collect real-time emergency visit data from hospitals. Visit the RODS Open Source Project website more examples of using RODS software modules.

# RODS Development Roadmap

RODS Feature	Already exists in RODS	Exists as GPL compatible source code	To be developed
HL7 Listener	X		
HL7 Parser	X		
Text File Parser	X		
XML Parser		X	
Simple Bayes Syndromic Classifier	X		
Syntactic/Semantic NLP Classifier		X	
Keyword Classifier			X
ICD-9 Classifier			X
Multiple Datatype Classifier		X	
Diverse Database Options		X	
Integrated Data Warehouse Engine	X		
External statistical analysis tools	X	X	
RLS Detection Algorithm	X		
Manual Data Entry Interface		X	
Diverse GIS Software Options		X	
LDAP Interface		X	
Time Series Graphing	X	X	
Email Notifier	X		
Database Encapsulation	X		

The development roadmap focuses on expanding the types of public health surveillance data collected; case classification and outbreak detection technologies; and integration into existing IT environments. Many desirable features of disease surveillance systems already exist as open source software that can be integrated into the RODS Open Source Project.

# openrods.sourceforge.net

The screenshot shows a Mozilla browser window displaying the website for the RODS Open Source Project. The browser's address bar shows the URL <http://openrods.sourceforge.net/>. The website has a dark blue header with the title "The RODS Open Source Project" and subtitle "Open Source Outbreak and Disease Surveillance Software Development" in yellow text. The main content area is divided into two columns. The left column is titled "Announcements" and contains three entries with dates: 10/01/2003, 9/29/2003, and 9/8/2003. The right column is titled "Upcoming Meetings and Events" and lists two meetings: "Syndromic Surveillance Developers Meeting" and "Medical Informatics Developer Meeting". A sidebar on the right contains a navigation menu with links for "RODS announcements & meetings", "Information", "Development", and "Links". The footer of the website includes a copyright notice for 2003 University of Pittsburgh and a logo for SourceForge.net.

RODS Open Source Project - Open Source Outbreak and Disease Surveillance Software Development - Mozilla

<http://openrods.sourceforge.net/>

## The RODS Open Source Project

### Open Source Outbreak and Disease Surveillance Software Development

#### Announcements

10/01/2003

[Read](#) (pdf) how the different RODS Software Modules can be used in existing or planned public health surveillance systems such as NEDSS implementations.

9/29/2003

Read about how the RODS Open Source Project will remove a barrier to deploying outbreak and disease surveillance systems in two papers ([Paper 1](#), [Paper 2](#), pdf) submitted for publication.

9/8/2003

The Real-Time Outbreak and Disease Surveillance (RODS) system is software designed for the early detection of bioterrorism and disease outbreaks.

This software is now open source, released by the University of Pittsburgh under the [GNU General Public License](#).

The RODS Open Source Project hopes to stimulate further deployment of computer-based surveillance systems and create a [community](#) of [open source developers](#) who will create the most innovative outbreak and disease surveillance software in existence; an [active user base](#) that can suggest new features; consultants and companies that support and deploy the software; and [scientists](#) who can transfer research prototypes or insights into practice through this software project.

Go to the [introduction](#) to read some basic information about the RODS system.

#### Upcoming Meetings and Events

##### Syndromic Surveillance Developers Meeting

Date & Time: 10/23/2003 6PM  
Location: Assemble in front of the RODS Open Source Project Poster during the poster session at the National Syndromic Surveillance Conference. We will then convene in a nearby saloon.

##### Medical Informatics Developer Meeting

Date & Time: Coinciding with the American Medical Informatics Association Fall Symposium 11/8/2003 - 11/12/2003  
Location: Washington, D.C.  
(specific time and location TBA)

Please [sign up](#) to the [announcements mailing list](#) or [RSVP](#) [jue@cbmi.pitt.edu](mailto:jue@cbmi.pitt.edu) so that we can notify you of any changes to meetings times and locations!

#### Acknowledgements

The RODS Open Source Project is supported by Pennsylvania Bioinformatics Grant ME-107.

#### RODS announcements & meetings

- [download](#)
- [get support](#)
- [contribute](#)
- [people & collaborators](#)

#### Information

- [introduction](#)
- [documentation](#)
- [FAQ](#)
- [publications](#)
- [mailing lists](#)
- [change logs](#)

#### Development

- [roadmap](#)
- [report bugs](#)
- [suggest features](#)
- [patch the code](#)
- [access CVS](#)

#### Links

- [rods laboratory](#)
- [auton laboratory](#)

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At the RODS Open Source Project Website, you can download compiled software, download source code, join email lists, contribute to the project, and obtain more information.

**I WANT YOU**



**FIGHT DISEASE OUTBREAKS AND JOIN**

**THE RODS OPEN SOURCE PROJECT**

**<http://openrods.sourceforge.net>**