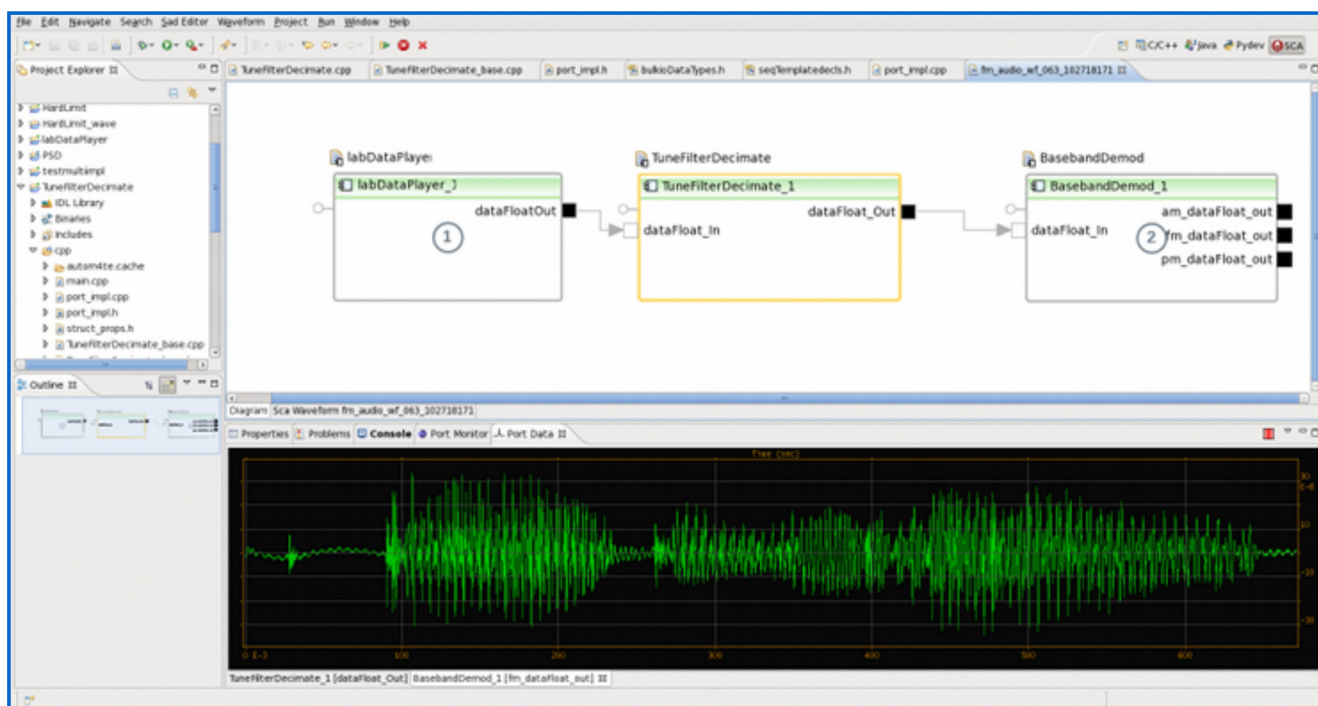




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REDHAWK



Description

REDHAWK is a software-defined radio (SDR) framework designed to support the development, deployment, and management of real-time software radio applications. To support the design and development of software applications, REDHAWK provides tools that allow development and testing of software modules called "Components" and composition of Components into "Waveform Applications" that can be seamlessly deployed on a single computer or multiple network-enabled computers.

The REDHAWK integrated development environment (IDE) provides tools to support development of REDHAWK software. The development and deployment of REDHAWK Applications are aided by graphical editors and drag-and-drop Waveform construction. The IDE allows users to interact with and control multiple running REDHAWK instances and applications.

Recent Announcements

Release of REDHAWK 1.10.2 (February 13, 2015) - Download the new core framework, IDE, and documentation from our [Downloads](#) page. The effort in REDHAWK 1.10.2 focused on fixing bugs and improving the reliability of the IDE. For information about the bug fixes and improvements of this release refer to the [Release Notes](#).

Release of REDHAWK Web LiveDVD 1.1 (Beta) (January 22, 2015) - REDHAWK Web LiveDVD 1.1 (Beta) provides users a fast and simple way to interact with a hardware device using REDHAWK. REDHAWK Web LiveDVD 1.1 (Beta) is a demonstration of a full REDHAWK application that can be used to tune and listen to FM radio stations. The demo utilizes a web-based administration console for interacting with the REDHAWK application and includes real-time plotting and streaming audio. The demonstration is designed to use a USB RTL device or can be run in simulation mode if no RTL device is present. The LiveDVD also contains the REDHAWK Development IDE and source code. Download the REDHAWK Web LiveDVD 1.1 (Beta) from our [Downloads](#) page.

Release of REDHAWK 1.10.1 (December 29, 2014) - Download the new core framework, IDE, and documentation from our [Downloads](#) page. The effort in REDHAWK 1.10.1 focused on fixing bugs and improving the reliability of the core framework and IDE. For information about the bug fixes and improvements of this release refer to the [Release Notes](#).

Release of GNUHAWK 1.10.0 and the REDHAWK Sub\$100 Project (October 16, 2014) - [Release Notes](#).

GNUHAWK 1.10.0 is a software package containing a shared library and Components that enable GNU Radio blocks to be used within REDHAWK 1.10. GNUHAWK provides reusability of GNU Radio block algorithms and capabilities by making them interoperable with other REDHAWK Components within the REDHAWK 1.10 software framework without requiring a separate GNU Radio installation.

Download the GNUHAWK source and documentation from our [Downloads](#) page.

The Sub\$100 project showcases the ability of REDHAWK to scale from desktop to low power ARM system with ease, without code rewrite, on a constrained budget. The project's total hardware cost is just below \$100. The release contains the instructions, the source code, and a reference waveform, for creating a Radio Broadcast Data System (RBDS) receiver. The hardware involved in the project can also be used to process other RF signals, such as, ADS-B data, GPS data, or images from the NOAA weather satellites.

Download the Sub\$100 documentation from our [Downloads](#) page.

Release of REDHAWK 1.10.0 (August 1, 2014) - Download the new core framework, IDE, and documentation from our [Downloads](#) page. For information about the focus of this release, an overview of the new features or enhancements included in this release, and guidance for upgrading from a previous version of REDHAWK, refer to the REDHAWK Version 1.10 [Release Notes](#). For a list of bug fixes and new features, view the [IDE](#) and [core framework](#) changelogs.

The effort in REDHAWK 1.10 focused on simplifying the user interaction within the IDE, improving how REDHAWK handles FrontEnd Interface Devices and logging, improving the scalability of the Core Framework, and adding a new interface to support bursty data.

Getting Started

For detailed installation instructions, refer to the [Installation Instructions](#). For a quick introduction to REDHAWK, refer to the [Getting Started Guide](#).

Software

REDHAWK consists of the core framework, development tools, libraries, and reusable building blocks. The Eclipse-based REDHAWK IDE can be used to aid in the development and deployment of REDHAWK Applications. Additional REDHAWK Eclipse-based products are built from a subset of the IDE plug-ins including the SCA Explorer.

For a full list of the git repositories, refer to the [gitHub page](#).

Documentation

For complete REDHAWK 1.10.0 documentation, refer to [Documentation](#).

Technology Components

REDHAWK is built using the following technologies:

- [Eclipse](#)
- [JacORB](#)
- [NeXtMidas](#)
- [OmniORB](#)
- [OSSIE](#)

Support

The REDHAWK community uses both [StackOverflow](#) and [SuperUser](#) for discussion and questions pertaining to REDHAWK. See the [Community](#) page for information about each site.

License

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