# CIWS – Customizable Instrument Workstation Software system for telescope-independent L0/L1 data handling Code: CIWS-IASFBO-TN-009 Issue: 0.1 DATE 02-04-2014 Page: i

Internal Report IASF Bologna n. 640/2014

#### **CIWS-FW Web Site**

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#### **DOCUMENT HISTORY**

Version	Date	Modification
d0.1	02/04/2014	First draft

### **CIWS**

## Customizable Instrument Workstation Software (CIWS) for telescope-independent L0/L1 data handling



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#### 1. Introduction

#### 1.1 Purpose of the document

The Customizable Instrument Workstation Software (CIWS) project is aimed at providing a software framework (CIWS-FW) for the development and operations of the Instrument Workstation (IW) required to support the Assembly, Integration, Verification and Testing (AIV/AIT) activities on scientific instruments for space borne experiments and ground-based telescopes in Astrophysics.

In addition, the CIWS-FW should facilitate the refurbishment of the IW software for the subsequent Commissioning and Operations phases to be carried out either in the mission Ground Segment of space-borne experiments, or in the Observatory site of ground-based telescopes.

In order to publish the CIWS-FW to the scientific and technological community a web site is created. The goal of the CIWS-FW web site is to show the framework features. The framework download and support is provided by Redmine. The purpose of the present document is to present the CIWS-FW web site.

#### 1.2 Definitions, acronyms and abbreviations

#### 1.2.1 Definitions and Terminology

CIWS developer	They will exploit the CIWS-FW in order to build the CIWS IW. They will take advantage of support programs, code libraries or other software included in the CIWS-FW and exposed through an API.
Instrument workstation	The instrument workstation is a workstation that support the verification and monitoring activities to be carried out on the instrument during the development and operative phases of spaceborne or ground-based telescopes. The system is limited to data handling tasks, and does not include the instrument command generation and command handling tasks.

#### 1.2.2 Acronyms and abbreviations

IW Instrument Workstationù

API Application Programming Interface

CIWS Customizable Instrument Workstation Software

DNS Domain Name System

IP Internet Protocol

CMS Content Managament System

URL Unified Resource Locator

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#### 1.3 References

#### 1.3.1 Applicable Documents

#### 1.3.2 Reference documents

RD [1] CIWS User Requirement Document (URD) - M. Trifoglio - 16/09/2013.

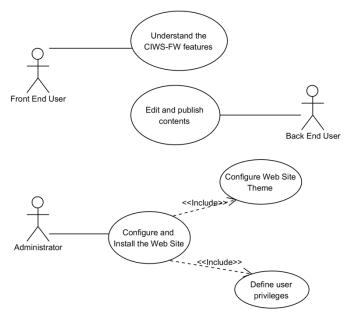
#### 1.4 Overview of the document

The next chapter presents the design of the CIWS-FW web site. The chapter 3 reports the details of the site installation. Chapter 4 justifies the WordPress CMS choice and last chapter but not least presents the CIWS team.

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#### 2. The CIWS-FW Web Site Structure

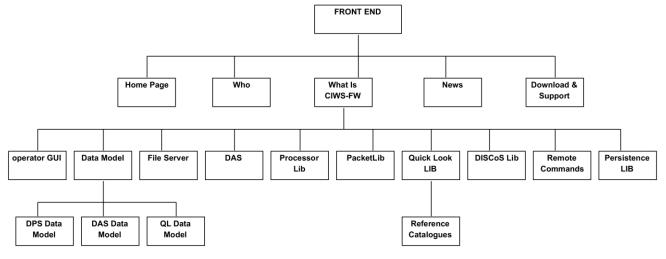
The user requirements of the CIWS-FW web site are resumed in the following use cases diagram:



2-1Use Cases Diagram

The installation and configuration of the web site is in charge of the administrator which can also configure the user theme and define the user privileges. Indeed the Back End User has grant to update the contents. The web site target is to share the CIWS-FW capabilities to the community.

The Web Site has the page structured defined in figure 2-2.



2-2 Web Site Structure

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#### 3. CIWS-FW Web Site Installation and Hosting Requirements

The CIWS-FW Web Site is presently installed on a Server specially prepared for the CIWS project support. It site in the IASF - Bologna Server Room. The URL is ciws-fw.iasfbo.inaf.it/fw

To publish a web site shall be satisifed base system requirements:

- Server machine with public IP;
- Web Server Apache;

Since we are decided to use a CMS the following requirements are added:

- PHP 5.2.4 or greater;
- MySQL 5.0 or greater;
- mod\_rewrite Apache module

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#### 4. Why it is used the CMS Word Press

WordPress is largely used for the Web Site creation. Everything from simple websites, to blogs, to complex portals and enterprise websites, and even applications, are built with WordPress. WordPress combines simplicity for users and publishers with under-the-hood complexity for developers. This makes it flexible while still being easy-to-use.

The following is a list of some of the features that come as standard with WordPress, however it is possibile to create or to use one of thousands of plugins that extend the WordPress features:

- Simplicity to content install, updating and publishing;
- WordPress provides tools to the contenten management (eg.create drafts, schedule publication, define the contents public or private);
- It allows to define different users privileges in order to share the site management and editing. Administrators manage the site, editors work with content, authors and contributors write that content:
- Media management is provided to upload images also drag and droping the media into the uploader. It is also allowed add alt text, captions, titles and create images gallery;
- WordPress generates code full compliant to the W3C standards;
- The layout is defined through themes system. Thousands of theme are already available. All themes are editable and customizable;
- The Search Engine Optimization is approved by Google team;
- WordPress is licensed under the GPL.

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#### 5. The CIWS-FW Team

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