WP11 - Dissemination and Exploitation (WWW)



Deliverable D11.5 - Dissemination and Use Plan

WP11 - Dissemination and Exploitation (WWW): Deliverable D11.5 - Dissemination and Use Plan $\,$

by Alfons Crespo

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Document presentation

Table 1. Project Co-ordinator

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|---------------------|---|
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Table 2. Participant List

| Role | Id. | Name | Acronym | Country |
|------|-----|--------------------------------------|---------|---------|
| CO | 1 | Universidad Politécnica de Valencia | UPVLC | E |
| CR | 2 | Scuola Superiore S. Anna | SSSA | I |
| CR | 3 | Czech Technical University in Prague | CTU | CZ |
| CR | 4 | CEA | CEA | FR |
| CR | 5 | UNICONTROLS | UC | CZ |
| CR | 6 | MNIS | MNIS | FR |
| CR | 7 | VISUAL TOOLS S.A. | VT | E |

Table 3. Document Version

| Release | Date | Reason of change | | |
|---------|-----------|------------------|--|--|
| 1.0 | November, | First Release | | |

Chapter 1. Dissemination and Use Plan

1.1. Introduction

The goal of the Dissemination and Use Plan is describing the general efforts that are, and will be, dedicated to the promotion of the OCERA project. This promotion requires to identify and describe the activities to be performed in order to promote and disseminate the knowledge gained during the project, the project's results and the practical advantages of the OCERA use in the development of embedded real time systems. The medium-term result of the OCERA project will be the dissemination of novel software technologies from the academic world to final user, in order to realize the next generation real-time computer systems.

The plan is addressed in two directions:

- Towards the marketing activities in order to enhance the potential of the use of the OCERA Components to build embedded real time systems
- Towards the publication of project's results in the technical and scientific forums, EC events and general RTD sector.

The Dissemination Plan reviews the range of target audiences and groups for dissemination and support, the information to be disseminated, the dissemination media options and agenda for dissemination. The Use plan is a first step towards the Technology Implementation Plan (TIP, D11.9), which is written at the end of the project as it is due at month 30. The TIP will describe the participants actual achievements in dissemination and their plans at that time for the exploitation of their results. The TIP will, where appropriate, refer to the present Dissemination and Use plan, indicating how and whether anticipated activities actually took place or were modified in the light of circumstances (or where other actions and measures initially unplanned were introduced).

The production of the Dissemination and Use Plan forms an important part of the first stage of the project work. An internal review and study of the DUP will be undertaken before defining the TIP. The TIP will be structured accordingly to the European Commission's recommendations by precising for each partner how it will exploit project results within its organisation. It will then describe for each individual partner the results available through them for exploitation by others and finally the TIP will propose a summary by the Project Coordinator of the European added value from the project as a whole.

1.2. Identification of Target Audiences

The work of the OCERA project will be of interest to a wide range of groups across Europe and beyond. These groups and the focus of their interest can be:

- **Industrial developers:** working in the design and development of hard and soft real-time embedded systems for a wide spectrum of applications (multimedia, process control, aeronautics, robotics, etc.) based on Linux and RT-Linux.
- **Operating system developers:** interested in new real-time features to be included in the Linux operating system and the generation of embedded systems.

- Real-time systems community: opened to new advances in specific aspects of the
 development (scheduling techniques, faul-tolerant mechanisms, resource reservation
 policies and communications).
- Groups in EC projects: interested in the use of the development of new software technologies for the control of hard and soft complex real-time distributed systems addressing aspects as methodologies, tools, development environments and certification of components

1.3. Types of Information

The different groups described above will have an interest in a range of information deriving from the knowledge gained during the OCERA project. The types and levels of information to be disseminated will be:

1.3.1. General Information

This information includes contact details for the project and broad descriptions of the project's aims and objectives, related areas of research, and information about project partners and the gateways and other services they represent. A link o each partner web site provides concrete information about their projects and products or publications. All this information is from the beginning in the web site of the project.

1.3.2. Project Deliverables

More detailed information about the work of the project will be needed by those interested in specific topics such as methods, techniques and development issues. We need to provide access to internal and external project deliverables and, where appropriate, to the research work on which these are based. Public deliverables (reports and software) will be available in the web site. Internal documents can be only accessed by partners.

1.3.3. Technical Publications

Additionally to the project deliverables there is an important aspect related to the new technological advances obtained during the project. Promotional and scientific papers will be written by the partners and sent to different journals, conferences, symposia, workshops, exhibitions and technical demonstrations.

1.3.4. Training and Technical Support

OCERA project documentation will offer the possibility of training to the future users and developers. To support training, we will develop a training documentation and CD-ROM containing the Open Source deliverables and the documentation. The preparation of the training documentation will consist in documentation rewriting of each module to create the training documentation, to add new components not developed by OCERA, and to gather the development tools and utilities used for development.

All the documentation will be merged into a USER'S GUIDE and a PROGRAMMER'S GUIDE. Each component developer being responsible of the PROGRAMMER'S REFERENCE MANUAL and MANUAL PAGES (UNIX way) for the developed components. The training documentation will consist in different case studies to show the use and facilities of the OCERA components. Each case study will contain assignment, solution and its explanation/discussion.

The creation of the training/example CD-ROM will be done using the Documentation and development tools gathered in Training and Technical Support work-package, and

the Source Code of the up-to-date version of the software. The CD-ROM will also include an installable version of the software with RTLinux and the developments tools, with the goal to facilitate the installation of a RTLinux/Ocera development system and/or the installation of a minimal set of components for embedded systems or tiny systems. The component installation will be driven by an installation software. We will also design a CD-ROM cover and documentation to make the Ocera CD-ROM and documentation attractive and easy to use and to read.

1.3.5. Marketing activities

Following the marketing plan the consortium will need to specify and carry out certain actions that will help market the development. These actions lay in the tactical side of marketing and they are necessary in order to implement the aims of the marketing plan. The consortium apart from developing a quality set of components offering them attractively and making it accessible to the target customer, must also communicate it effectively. In order to do that we will use a certain mix of activities in the attempt to market the system. The design of promotional material (Posters, brochures explaining and promoting the system, CDs, etc.) will be use by partners in different events.

1.4. Dissemination

In order to immediately improve the Project visibility, a logo was designed and is to be used in all the dissemination tools, ranking from the web site to fact sheet, documents and reports:



Figure 1-1. OCERA Logo

1.4.1. OCERA Web Site

The first Dissemination task was the creation of the project web page. The OCERA web site (http://www.ocera.org) has been created to provide various information related to the project. It includes a restricted area for the Consortium, mainly used as document repository, and a public section. The site was opened for public access in March 2002.

All the relevant information regarding the OCERA web site are to be found in the corresponding Deliverable, Project Presentation and Initial Web Site (D11.1).

The OCERA web site (http://www.ocera.org) has been created as a main dissemination tool.



Figure 1-2. OCERA web page

The web page not only does it present the goals and objectives of the project in itself, but it also provides information about the partners and the activities carried out by each one. The technical support and development of the project is organised in SourceForge web site.

1.4.2. Sourceforge Web Site

Ocera's technical support and development is being hosted in http://sourceforge.net/projects/ocera

Ocera has chosen Sourceforge as the main technical support and development tool. Sourceforge is the main software development web site in the world and it is the ideal place to host an Open Source project. Due to the inherently distributed development of Open Source projects, it fits perfectly into the development dynamic of an (Open Source) IST project. Sourceforge integrates in the project page mailing lists, version control, bug management, etc...

It is important to notice that, being OCERA an Open Source project, we should have the appropriate conditions to let people know, use and contribute to the project. That would be difficult if we had opted for a private hosting in one of the partner's sites.

SourceForge.net is the world's largest Open Source software development web site, providing free hosting to tens of thousands of projects. The mission of SourceForge.net is to enrich the Open Source community by providing a centralised place for Open Source developers to control and manage Open Source software development. To fulfil this mission goal, we offer a variety of services to projects we host, and to the Open Source community.

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Sourceforge basic services are:

• SourceForge Collaborative Development System

from Sourceforge website

Advanced web-based tools provide easy maintenance of all facets of your project. These tools are located on the Project Admin page for your project, accessible from the summary page for your project. Through the project administration interface provided to SourceForge.net projects, you can post news items, easily administrate your development team,[...]

• Project Web Server:

from Sourceforge website

Clearly one of the most important parts to managing your project is providing potential users and existing users with information about your project. To aid you in reaching this goal, we provide you with your own virtual host on our project web servers. Each project has their own space for web content and CGI scripts. PHP scripts are also supported on the project web server, allowing you to build a more refined web presence for your project. Each project is provided with up to 100MB of space to host web content on their project web server.

• Tracker: Tools for Managing Support:

from Sourceforge website

SourceForge.net provides a suite of SourceForge-integrated support management tools, called Tracker. Tracker provides bug reporting facilities, the means for your users to submit support requests, the means for developers to easily submit patches for your review, and a suggestion box where people can post feature requests.

• Mailing lists and discussion forums:

from Sourceforge website

How can you stay in touch with your development team and your user base? Source-Forge.net provides projects with mailing list services and web-based discussion forums. The ability to administrate your mailing list is provided via a web interface. Public mailing lists hosted by SourceForge.net are archived within our integrated mailing list archival system, providing you and your users with easy access to previous list traffic from a web interface. We have also taken the time to implement a strong spam prevention system, reducing the amount of off topic and unwanted mailing list traffic.

Software Releasing Tools:

from Sourceforge website

Projects hosted on SourceForge.net may release their software through the use of a web-based file release system. Releasing your software through SourceForge.net provides you with greater visibility, and the means to track the number of times your software is downloaded. Software released through SourceForge.net's file release system is placed on a network of high-capacity, high-performance download servers, capable of handling well in excess of 1000 concurrent FTP connections and 3000 concurrent HTTP connections.

Users may monitor your packages to receive automatic e-mail notification when a new release becomes available. You may also choose to include release notes and changelog information with your releases, ensuring that your user base has easy access to the information they need.

Shell services and compile farm:

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from Sourceforge website

Developers on active SourceForge.net projects are provided with access to a shell account via SSH. This shell may be used for basic shell functions, has its own crontab, and may be used to directly manipulate the web content for your project.

· CVS services:

from Sourceforge website

Each project hosted on SourceForge.net is provided with their own CVS repository to aid in further development of your project. Developers on your project are automatically granted write access to your project CVS repository via SSH. Anonymous, read-only pserver-based access to your repository is provided to the general public. You may also view and compare the contents of your CVS repository through the use of a web-based interface, provided from your project CVS page (accessible from the summary page for your project).

One of the main reasons why we have selected Sourceforge as the development hosting environment is the built-in CVS capability. A appropriate use of CVS (Concurrent Versions System) allows partners to develop concurrently and asynchronously; avoiding then the usual dead-periods while a developer is waiting for contributions, whether source code or documentation.

1.4.3. Dissemination among the Scientific Community

For maximal impact of the OCERA project on the research community, the following international workshops/conferences and journals/magazines are possible targets for reviewed publication of our results:

Real-time Community

- Workshops, Symposia and Conferences: IEEE Real-Time Systems Symposium, IEEE
 Euromicro Conference on Real-Time Systems, International Conference on Reliable
 Technologies Ada-Europe, IEEE Conference on Real-Time Computing Systems and
 Applications, IFAC Workshop on Real-Time Programming, etc.
- Journals: Journal of Real-Time Systems, IEEE Transactions on Software Engineering, IEEE Transactions on Computers, etc.

Embedded Systems

- Workshops, Symposia and Conferences: Embedded Systems Conference,
- Journals: Embedded Systems Programming, Embedded Systems Journal, Dedicated Systems Magazine, Embedded Systems Engineering

Linux Community

- Workshops, Symposia and Conferences: Real Time Linux Workshop,
- Journals: Linux Journal, Linux Gazette, LinuxFocus, LinuxWorld, UnixWorld Online Magazine, Linuxpower.org

EC Events

IST Conferences, Demonstration and Exhibition weeks and Embedded Workshops

1.4.4. Training Activities

In the planning process, it is important to organise training activities to facilitate the use of the OCERA components. Training support activities can be

- Academic courses,
- · Meetings,
- · Computer-based discussion lists and forum
- Technical Assistance

1.4.5. Monitoring and evaluation methods of the Dissemination Plan

To determine our target audiences and to help us achieve our dissemination objectives, we shall conduct monitoring and evaluation methods throughout the project. The data gathered will be particularly important to decide upon promotional materials (particularly during the final year of the project) and the perspective for conference papers, articles and email announcements.

In that sense, we are using a web trends statistics tool to allow us monitor patterns of usage of the Web site. As well as giving us insights into the kinds of users we are attracting to the site over time, the statistics also provide useful indication of 'gaps' that might be filled by further promotional activity. We can also assess, to a certain extent, the effectiveness of other promotional and dissemination activities.

The statistics also indicate which sites are referring most visitors to the OCERA Web and countries distribution.

1.4.6. Industrial activities

Industrial partners are very well positioned in the market offering complementary services in industrial development, research institute and technical support. Each industrial partner will use the OCERA results in different way.

Unicontrols intends to use results of OCERA project as operating system in new type of his industrial control stations based on Compact PC / PC hardware. We estimate the realization of 70 such systems / 1 year after finishing this project. Using RT Linux free of charge will reduce price of each system for approx. 15 % in average and that is why it will be more competitive on industrial market.

MNIS expects from this project to get contact from industrial partner wanting to get help in developing Real-Time Components for RTLinux. MNIS expects to provide them with training and/or consulting services on the use on OCERA components and/or on the knowledge of developing new components.

Visual Tools is developing a new generation of video-surveillance products heavily based on internet and GNU/Linux technologies; these products provide web-based interfaces, communicate with protocols running on top of TCP/IP, run on customised linux kernels, etc. To be successful, this generation of products will need an internet and GNU/Linux-friendly control center, that can greatly benefit from the OCERA project results. The main validation development of Visual Tools in OCERA will be a networked control center for video surveillance applications. This control center will provide a web management interface to multiple video servers, and be used in the security domain. This control center must be designed to:

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- Handle overload conditions in a predictable way As any web-based application, it is subject to peaks in user access. A predictable policy must be defined and implemented to prevent "infinite slow-down" in the system operation.
- Guarantee minimum quality of service. Users will pay for the service provided, and
 they will be contractually guaranteed a certain quality of service. Therefore, the control center manager must be able to guarantee the required quality of service, with
 appropriate hardware and software.
- Gracefully handle malfunctioning subsystems. The control center will provide an increasing number of services (alarm monitoring, system configuration, automatic touring, etc.). These services will be provided by new modules in the networked control center, and it is crucial to prevent system collapse by missconfigured or malfunctioning services.

There is currently no similar product on the market, and significant developments would be required to develop one with the current state of the art. Early access and participation in OCERA will provide Visual Tools an ideal starting point for the development of its next-generation control center.

In addition to this main development, participation in OCERA will provide more indepth, working knowledge on real-time enhancements to Linux, that might be incorporated to future-generation embedded video-servers. Also, the real-time communication modules to be developed in OCERA might provide an opportunity to integrate fieldbus peripherals into video surveillance servers and control centers.

To summarise, OCERA outcomes in resource management, fault-tolerant and real-time communications are completely in line with Visual Tools technological and product strategy, and are crucial for the market success of the new generation of products' control center.

1.5. Dissemination and Use Plan

This section of the paper focuses on the specific actions and time scales for dissemination and support both during the project lifetime and in preparation for the launch of the fully-operational software, prototypes, etc..

Table 1-1. Dissemination activities

| Specific activities | S1 | S2 | S3 | S4 | S5 |
|--|----|-----------|-----------|-----------|-----------|
| Web specification and basic contents | X | X | | | |
| Web updating (reports) | | X | | X | |
| Components design and architecture specification | | X | | X | |
| Technical papers | X | X | X | X | X |
| Poster presentation and promotion | | X | X | X | X |
| Prototypes | | | | X | X |
| Tools | | | | X | X |
| Demonstrator | | | | X | X |
| User's Guide | | | | X | X |
| Case studies | | | | X | X |
| CD-ROM project | | | | X | X |