FROM

setting the user’s preferences
anywhere and anytime

TO

creating the context
for a new ecosystem to grow

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Welcome note

This is the last Cloud4all newsletter. Just when things started getting really exciting. This year we have been polishing the core components of Cloud4all, doing our last evaluation, presenting the Project in many diverse fora and paving the way for a bright future. Do not miss the opportunity to have a look at our latest developments and videos explaining Cloud4all from different perspectives. Since this is also the last Welcome Cloud4all note for the author of these words, it is a great opportunity to thank the contributions of all the partners working in this amazing Project. For 4 intense years, more than 20 partners have been working hard to accomplish the difficult task of making a success of Cloud4all. Their implication and ideas have enriched us all, and will definitely contribute to make a big change in digital accessibility in the forthcoming years. The hard and constructive reviews and the professional management style of the European Commission’s representative has made us improve in an ever critical effort to do a better job. I would not like to forget the many people that have stepped in and out during these years, they all deserve the credit for their outstanding contributions.

But this newsletter is not just a farewell, Prosperity4All continues and we will expand the GPII in Europe. We are working on setting the components that enable a new ecosystem to grow. An ecosystem that is accessible to people with disabilities, senior citizens and others with special needs. In the nearby future, we will have the Unified Listing ready and more prototypes will be coming soon.

Additionally, the GPII has received in the United States a 20 million dollar federal grant to roll out the first operational version of the GPII in a large-scale pilot test (GPII-APCP). The first two years of the grant will be devoted to creating a commercial grade version of the cloud-based system, working with IBM and Microsoft as industry partners. During the last three years, the technology will be deployed to an estimated 15,000 users.

Cloud4all is ending, but the GPII continues based on the work done in this Project. Thanks to all the C4A team.

Enjoy our joint C4A and P4A newsletter!

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C4A and P4A have received funding from the European Union’s Seventh Framework Programme for research, technological development and demonstration under grant agreements no. 610510 and 28960.
This month the EC funded Project Cloud4all finishes. Within the GPII, the Cloud4all Project has focused on the adaptation of any device, OS, AT and applications to user’s needs and preferences.

**SOLUTIONS**

Cloud4all has proved concept of auto-configuration from preferences in a variety of platforms and applications, such as Windows, Linux, Android, Java mobile, Digital TV, and Ticket Vending Machines (TVM).

Moreover, partners have developed demonstrators that automatically adjust their settings for two different browsers: Firefox and Chrome. Demonstrators also exist for smart home simulation applications, as well as various assistive technologies such as Supernova, Mobile Accessibility, eCtouch/eCmobile, Read and Write Gold, Maavis, and several more.

The Google Chrome extension, developed by ILUNION is available at the Chrome Web Store. Once installed, the browser extension presents an icon in the toolbar. If users have GPII installed and log in, there is nothing else they need to do. Their settings will be automatically applied to the page they visit. For non-Cloud4all user, they can click on the extension icon to launch a dropdown panel.

**Maavis** is a software developed by Opendirective that provides greatly simplified access to media, communications, web and programs on Windows computers. Maavis is Cloud4all-compatible, which means that it is able to retrieve the needs and preferences of Cloud4all users and adapt its User Interface depending on the user’s needs and preferences. The following video introduces Maavis and shows how its user interface adapts to the needs and preferences of two different users.

Do you want to know more about C4A solutions? You can find more information at the Cloud4all website, with detailed setup instructions and our GPII wiki page.
STAKEHOLDERS

Cloud4all’s “stakeholders” include a wide range of players targeted during the project. Industry organizations and service providers (AT industry, ICT mainstream industry, technology-oriented organisations and service providers) have the potential of benefiting from the Project results. Public and Private Insurance Organizations and governmental organizations are key actors. In many cases the related service delivery costs of the ATs cannot be borne by people with disabilities themselves. Additionally, these organizations can largely benefit (in financial and social terms) from the uptake and financing of ICT applications and services compatible with Cloud4all architecture. Policy Makers, including regulators and procurers (local, national and European), and Legal Organizations that create policy and legal frameworks to support end-users and their families and frame the structure of the Assitive Technology Industry. The carers who regularly look after a person (sick, elderly, disabled person, etc.) can also benefit of the C4A developments. And in general, society as a whole can benefit of a more equal access to digital resources.

WHAT’S NEXT?

Cloud4all is part of the larger Global Public Inclusive Infrastructure effort, which continues in: Prosperity4All, GPII-APCP, Universal Interface and Information Technology Access Rehabilitation Engineering Research Center (UIITA-RERC),OCAD University’s Fluid and FLOE projects, and many others.

The code developed in Cloud4all is intended to be usable by real people, in the real world and these other projects are extending it to support new use cases, features, and components — and moving the Cloud4all research into reality.

Prosperity4All started on February 2013 to complement Cloud4all’s outcomes. Prosperity4all, also part of GPII, focuses on developing the infrastructure to allow a new ecosystem to grow. The UIITA-RERC has been working on the GPII concept from the start and are now taking the Cloud4all work and applying it in libraries as well as creating a Shopping/Alerting Aid extension to the Unified Listing. The FLUID and FLOE projects (which also preceded Cloud4all and provided some of its seed technologies) is continuing its work on personalization in the education space extending and incorporating Cloud4all efforts in its work. GPII-APCP is a $20 M project to deploy Cloud4all/GPII in for an estimated 15,000 users at the Onondaga Community College and several high schools in Syracuse, New York, and at American Job Centers across the country. Other independent efforts in Europe are working on moving the Cloud4all/GPII work forward into practice in Europe.

Together these efforts are:

1. Building a unified directory to find all products that match the user’s needs
2. Creating the entry point so users can adapt any device to their needs and preferences.
3. Constructing a space where developers can use the GPII to explore, create and test new ideas, then build them, and sell them internationally.
P4A: October’s Highlight: The Unified Listing

Shortly P4A will be delivering the first prototype for the Unified Listing, (UL). The Unified Listing is a database of assistive technologies (AT) and mainstream products with accessibility features. It brings together AT and mainstream product databases internationally into a single federated database that both draws from and feeds the other databases.

WHO does the UL serve?
- End users of AT solutions & mainstream devices with accessibility features.
- Caregivers
- Therapists and other AT professionals.
- Manufacturers of AT solutions and mainstream devices with AT features.
- Integrators and third-parties building solutions on top of the Unified listing.
- Developers and vendors

WHAT does the UL help users do?
- Locate existing solutions.
- Provide information about solutions:
  - For themselves,
  - To understand the field and what is available,
  - For market and competition research
  - About their products (developers/vendors)
  - About products (users)

Ongoing improvements: A special interface designed and optimized for MANUFACTURERS

In Cloud4all, the initial REST API for the Unified Listing was created, and was used to import data from EASTIN, and to integrate with the Semantic Alignment Tool. In Prosperity4All we are proposing to create an editing interface that can be used by all users to add and edit data, but which provides a special interface designed and optimized for manufacturers. We will introduce a mechanism for identifying manufacturers and their special relationships with products in the Unified Listing. In this sense, a tool is been developed to notify manufacturers when other parties (community members, database vendors), update information related to their products. Additionally, we are developing an improved mechanism for notifying federated database managers of new information from other vendors that is not already reflected in the dataset. It will also be possible to import scripts for other databases that affiliate. In Prosperity4All will also be adding to the Unified Listing the mechanisms for user feedback and feedforward to product developers and vendors – adn feed-sideways to users, (continues next page).
The Unified Listing, Developer Space and OpenMarketplace

The Unified Listing is core to the Developer Space. It is a primary mechanism for developers to reach their customers internationally. There is no cost to list products in the Unified Listing nor to use it. It is also the most comprehensive listing internationally. It is therefore a primary source for any developer, especially new developers, to be able to reach a broad audience effectively and economically. In addition, the Unified Listing is combined with technology such as the Shopping and Learning Aid which can take an individual’s needs and preferences and use them to help find all of the relevant products and features in the database. In addition users can as kit to alert them to any new prpducts or features that would appear and meet their needs.

The openMarketplace is separate from, but attached to the Unified Listing. The openMarketplace is a place where developers can actually sell their products if they do not have any other mechanism for selling their products and handling international purchases already.

Stories of End users
Alicia, accessing the Internet in any device

Alicia is a 75 year old pensioner living in a house for the Elderly. She suffers a visual impairment.

Alicia, frequently has problems due to her special needs when surfing the web. She requires specific settings (a high contrast and a big font size) in order to navigate online.

The information is displayed as Alicia needs it.

Cloud4all automatically adapts the device to the user’s settings.

Alicia does not need the help of another person to use a device.

These settings are not automatic nor easy to adjust. Every time she uses a computer, she needs another person’s help to adjust the settings. With Cloud4all and the GPII, Alicia only needs to key-in a USB pendrive and the computer will automatically display the information with Alicia’s settings. C4A partner, SingularLogic shows in the video how Alicia uses Cloud4all in her daily life to access the Internet and its resources, (watch the video).

If you want further information on the Unified Listing, please contact us:
info@prosperity4all.eu

Follow the “work in progress” of the UL:
http://ul.gpii.net

CHECK OUR LATEST VIDEOS!
Academics, developers and users, have their say... Visit C4A and P4A video channels.
C4a’s Final Evaluation Phase

Users are core to Cloud4all and Prosperity4All. Both projects collect and analyze users’ feedback and introduce the findings to the projects’ developments.

The third round of evaluation of Cloud4all solutions took place between May and August 2015. A total of 171 beneficiaries have participated in this pilot iteration (140 end-users, 16 developers and 15 stakeholders) in the three pilot sites (Greece, Germany, and Spain). End-users with different needs and preferences were involved.

For the pilot with end-users a realistic scenario was tested including the Needs and Preferences Management Tool (PMT) and different auto-configuration use cases that are relevant for the different user groups. Moreover, focus groups were organized to provide a deeper discussion on the Cloud4all concept and solution.

The main conclusions that can be drawn from these tests are:

1. The Cloud4all auto-configuration procedure is understandable and usable by all the user groups involved. Log in methods are considered very easy for all the user groups.

2. Cloud4all allow users to interact with unfamiliar devices or solutions. Users positively valued being able to interact with an unfamiliar device or solution. Some users are very attached to their own ATs or specific configuration, but offering tutorials and guided tours for unfamiliar ATs could help users to reduce their initial rejection.

3. Users feel comfortable with the PMT. The PMT was considered very usable and useful for most of the users. In the future, the usability of the UI and the number and type of settings covered would be further improved to accommodate the needs of specific user groups.

4. The user experience and concept acceptance of Cloud4all is highly positive. The different user experience metrics collected have shown that all the auto-configuration use cases were considered as ‘Good’ or ‘Excellent’. Moreover, the ease of use, usefulness and intention of use of the Cloud4all as a concept were also rated as ‘Excellent’ by all the user groups involved.

Although this is the last round of evaluations within Cloud4all, the end-users, developers and stakeholders have provided a considerable list of recommendations for improvement that will be taken into account to evolve the GPII ecosystem in the future beyond this project.
P4A’s First Evaluation Phase

“P4A ECOSYSTEM: highly innovative platform and direct contact with endusers”

The first evaluation phase of the P4A ecosystem with product and service developers took place between May and July 2015. The objective was to evaluate the developers’ experience in using the components offered in the project and core architectural elements, where developers (and other professionals) can interact with the P4A ecosystem.

More than 30 developers, with diverse professional backgrounds, participated in different evaluation sessions. They reported that attractive components had the following characteristics:
- Potential for expanding functionalities
- Limited license restrictions
- Programming language
- Low complexity of integration process
- Sufficient support
- Sustainability / maintenance

The first evaluation phase revealed first insights into the needs of the developers for a successful interaction with the P4A ecosystem.

In summary, these are the major findings and conclusions:

1. The developers expect P4A to be a highly innovative platform

2. The developers need direct contact with end-users in order to be able to develop user-centred systems/software.

3. The developers want to use the infrastructure but they do not want to understand the underlying structure in detail.

4. An important aspect pertaining across several evaluation sessions was the need for the creation and maintenance of efficient communication channels.

Developers needed!
The second evaluation phase with developers starts in October 2015. If you would like to participate and help us create the P4A ecosystem send us an email: info@prosperity4all.eu
EVENTS
Conferences, Open Days, Congresses

During the last six months we have assisted to the major accessibility Conferences around the world, we have also organised our own project events, and had stands in different events to present our latest outcomes and help spread the word.

OER (Open Educational Resources) accessibility sprint
In February, partner IDRC hosted an OER (Open Educational Resources) accessibility sprint. P4A was discussed in many of the sprint groups and early designs were made for tools that are good candidates for the developer space.

GPII Copenhagen Hackathon
In June 29th our team organised a hackathon focused on the core architecture framework of the GPII. The hackathon had two goals: (1) Discussing and planning the major issues in the remaining Cloud4All work, as well as discussing several aspects of the Prosperity4All work and (2) making good progress in the codebase, getting long standing pull requests merged.
All in-all, it was a great week - very intense, long and exhausting, but also very social, productive and really enjoyable. The hackathon included 6 people physically present and 4 people attending online.

OPEN DAYS-different stakeholders
In our projects’ open days we demo the latest outcomes to people that come and to visit us. When we plan these open days we pay special attention to our projects’ target audience groups.
The event “Dövas Day 2015” (deaf day) took place in Leksand, Sweden. This is an annual event, gathering the Deaf community in Sweden for workshop, exhibition, networking and socialization through a weekend.
Omnitor presented Cloud4all concept at the conference exhibition. 50 of the visitors of stopped by the Cloud4all stand to learn about the project and to get a demonstration of visual adaption of Omnitor eCmobile.

C4A partner, Technical University of Madrid (UPM), participated in “L’Alfàs Intelligence & Innovation”, that took place June 12th, in L’Alfàs del Pí. L’Alfàs intelligence & Innovation is an initiative of public – private partnership aimed to catalyse innovative and technological opportunities. UPM presented different initiatives and projects in the framework of Smart Houses by showcasing prototypes. Cloud4all is one of these projects, with a demo of how it works on a Windows PC when using preset profiles.
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Open Day at DRT4all (September 24-26th)
The main goal of the International Congress DRT4All is getting to know about the latest advances in ICT supporting independent living of people with functional limitations, and to demonstrate how these technologies can work together in order to help people with disabilities and the elderly lead a better life, and to achieve a full integration into society.

CONFERENCES
We were present in the major accessibility Conferences: AAATE, CSUN, M-Enabling HCI-I, Mobile-HCI, Drt4all, UCP Annual Conference, TDI Biennial Conference, the European Disability Forum, among others. (If you want to access the Conferences’ presentations please go to P4A and C4a’s websites).

SAVE THE DATE!!
FACILITATORS SESSIONS (1st session November 16th, 2015)
P4A’s partner Guadalinfo will be organizing 8 practical sessions with their facilitators in Spain. Approximately 800 facilitators and other agents will be attending these sessions.

ICCHP Conference (July 13-16,2016)
Partner, ki-i will organize a Prosperity4All thematic session. The ICCHP provides an interdisciplinary platform and scientific forum including all sorts of stakeholders.
OUR LATEST PUBLICATIONS

IISA 2015 Conference

CSCESM 2015 Conference

✓ Gutierrez J.A., Peinado I., Ortega-Moral M., de los Rios S., Cabrera-Umpierrez MºF., Arredondo T., Paramo M. *Facilitating Open and Universal Access for people with disabilities and for all.*  
Book chapter in *Handbook of Research on Human-Computer Interfaces, developments and applications.*

✓ Gutierrez J.A., Ortega-Moral, M. *Mejora de la accesibilidad mediante la personalización web: Implementación de add-ons para navegador y páginas web*  
DRT4all 2015 Conference

AAATE 2015 Conference


HCII 2015

✓ Chalkia E., Bekiaris E., Madrid I. *Service composition towards increasing end-user accessibility*  
✓ Gower V., Andrich R. *Progress of the European Assistive Technology Information Network*  
✓ Smirek, L., Henka, A., Zimmermann, G. *Giving Elderly Access to Smart Environments Providing Adaptive User Interfaces Based on Web Components, the Universal Remote Console and the Global Public Inclusive Infrastructure.*  
✓ Zimmermann, G., Stratmann, A., Reeß, D. & Glaser, T. *Patterns for User Interface Adaptations – Towards Runtime Adaptations for Improving the Usability of Web Forms for Elderly Users.*  
✓ Ballieu Christensen L. and Tanja Stevns T. *Universal Access to Alternate Media.*
C4A & P4A Joint newsletter.

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Online version of this newsletter is available in the Project website: www.prosperity4all.eu

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