



HORIZON EUROPE FRAMEWORK PROGRAMME

CloudSkin

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Adaptive virtualization for AI-enabled Cloud-edge Continuum

D6.1 Communication Plan

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1 Executive summary

This document outlines a well-defined and customized CloudSkin dissemination and communication plan: it defines the required process, tools and strategy for dissemination and communication activities. It also reports the activities that took place during the first five months of the project and the planned activities for the rest of the project.

2 Introduction

The main purpose of the Communication Plan (Deliverable 6.1, Work Package 6) is to present a initial proposal to maximise the visibility of the project. This document comprises dissemination and communication objectives, strategy (corporate image, material, target audience, dissemination and communication channels and initial plans), related organizations and projects, and a initial progress report of the activities performed during the first year of the project.

3 Dissemination and communication objectives

The general objectives of the joint CloudSkin dissemination strategy are to disclose project results that can be used by the target audience to progress their own work, i.e., to build upon the knowledge generated by CloudSkin, fertilising the advancement of technology, science, industry, and policy.

CloudSkin communication and dissemination activities aim to maximize the impact of the project, increasing awareness and engaging key stakeholders. Find below the dissemination and communication objectives that will help CloudSkin consortium to achieve it:

- 1. Definition of the communication and dissemination strategies with the aim of circulate the project's results via a public website, social media channels, news, participation in conferences and presenting papers to scientific journals.
- 2. Building a dynamic community of researchers and applications designers who engage with the project via the public website and social media channels.
- 3. Communicate the potential benefits of the CloudSkin research to industry stakeholders and the wider public via targeted events and project dissemination materials.
- 4. Facilitate cross-fertilisation with other projects working on overlapping areas.

4 Dissemination and communication strategy

CloudSkin dissemination and communication plan is structured around four main pillars:

- 1. The brand image of the project
- 2. The target audience
- 3. The dissemination and communication channels
- 4. The dissemination and communication material

A set of strategic actions have been defined for developing these pillars. Detailed information is given in the following sections.

4.1 Corporate image

A common graphic identity has been developed in order to create a recognisable brand associated to the project. This image should be consistently applied by all partners and in all dissemination materials.

A brand guide has been developed and serve as a manual to define the CloudSkin brand usages including the colours palette, different types of logos, font size, etc. This stylebook is located in the internal Google Drive storage of the project[1], available for all partners to apply correctly.

4.1.1 Logo

The logo of the project has been defined in different formats, see Figure 1.



Figure 1: CloudSkin logos.

4.1.2 Font and colours

There is a variety of font types and colour selection for the CloudSkin elements, providing flexibility for various dissemination and communication channels, see Figure 2.

4.1.3 **Project presentation template**

A Microsoft PowerPoint (.pptx) template have been designed to use in the main dissemination activities of the project (workshops, conferences, training courses, etc.). Figure 3 shows some examples of the different slides.

4.2 Dissemination and communication material

4.2.1 Brochure

A CloudSkin brochure (see Figure 4) has been designed to provide the project overview, and hand out in events where CloudSkin will have a particular presence. The brochure includes the project objectives and mission, the description of the different use-cases, as well as the general information of the project (title, funding scheme, partners, etc.). The brochure will be uploaded both in the project internal Google Drive, and in the website, so all partners can download it and print it locally.

COLOURS		
	#074ca8 #3a485b	
ONT TYPE		
	Example	Font
Logo	CloudChin	
LOGO	CIOUQSKIN	Clear Sans Bold
Titles	TITLE	Clear Sans Bold Impact
Titles	Loren ipsum	Clear Sans Bold Impact Calibri

Figure 2: CloudSkin colours and fonts.

4.2.2 Poster

Similarly, a CloudSkin poster (see Figure 5) has been designed to provide the project overview, and present it in events where CloudSkin will participate. The brochure includes the project objectives and enablers, the description of the different use-cases, as well as the general information of the project (title, funding scheme, partners, etc.). The brochure will be uploaded both in the project internal Google Drive, and in the website, so all partners can download it and print it locally.

4.3 Target audience

The CloudSkin consortium encompasses expertise and users from different fields, and therefore it is appropriate for each partner to tailor the key messages it wants to deliver to their target audience of choice, and to the specific dissemination and communication activity.

CloudSkin has identified the possible target audiences listed in Table 1.

Target audience	Description
Academia	Institutions primarily for education and early research
Public R&D	Institutions with innovation-oriented R&D and technology transfer (e.g. EU Investment Bank, Start-Up Europe, EC Digital Innovation Hubs)
Industry R&D / R&I	Private companies that maintain R&D groups for new products and services, e.g. Telefonica, or T-systems
Policy makers	Governmental agencies mainly concerned with policy setting to enhance European competitiveness (e.g. Chamber of Commerce, Regional Devel- opment Units)
IT experts from SMEs	Developers of new services and applications, typically for vertical indus- try requirements

Table 1: Descri	ption of Clo	udSkin targe	t audience.



Figure 3: CloudSkin presentation template.

4.4 Dissemination and communication channels

The following sections describe in detail the dissemination and communication channels selected to efficiently reach the target audience and to maximise the visibility of the project.

As part of the dissemination strategy, all the activities, publications, events, etc. where Cloud-Skin participates are actively registered in an excel file. It is publicly available for the consortium, and the partners are including their dissemination and communication activities. The list of activities includes all the important information of the dissemination or communication activity, such as the type of activity (publication, keynote, conference, workshop, interview, poster, training, press release, white paper, success stories, factsheet, video, demo,...), the type of audience reached by each activity (scientific community, policy makers, general public, industry, media and civil society), or the number of attendees. Section 6 presents the activities, occurred and planned, during the first period M1-M12 of the project.

4.4.1 Website

The CloudSkin public website is available at http://cloudskin.eu and http://www.cloudskin.eu, since the beginning of the project (M1). The CloudSkin public deliverable "D1.1 Public Project Website" [2] summarizes the structure, the content and the functionalities of the website.

4.4.2 Social media

Social media channels are proved to be effective to disseminate the most relevant information about the project, reaching specific audiences. The social media activity has been concentrated on Twitter (@CloudSkin2023), also available since the beginning of the project (M1), see Figure 6.

Both the website and the Twitter account will be used for the public communication of all project activities and events.

4.4.3 Publications

All research results achieved in the scope of CloudSkin will be presented to the scientific community in the form of high quality publications in conferences, journals or magazines, and presentations and demonstrations in conferences, workshops and exhibitions. The partners have the goal to write high impact publications in different conferences and journals, targeting different domains, from Metabolomics, Surgery to Agriculture, or 5G Automotive. As an example:



Figure 4: CloudSkin project overview brochure (front and back views).

- Conferences: USENIX ATC, IEEE Cloud, ACMSYSTOR, VLDB, ACMSIGMOD, ACMSOCC, EDBT/ICDT, IEEE MASCOTS, USENIX FAST, ACM SOSP, ACM OSDI, EuroSys, SIGCOMM, IEEE ICDE, IEEE ICDCS, EuroPar, Middleware, Intelligent Systems forMolecular Biology, European Conference on Computational Biology.
- Journals: Elsevier FGCS, IEEE/ACMTransactions onNetworking, IEEE InternetComputing, VLDBJ, ACM/IEEE Transactions on Database Systems, IEEE/ACM Transactions on Computational Biology and Bioinformatics, Briefings in Bioinformatics, NatureMethods, PLOS Computational Biology, BMC Bioinformatics.

These published results will abide by a green open access strategy where articles and related data will be selfarchived by the authors in an open access repository (e.g., an institutional or a disciplinary repository) after the corresponding scientific publisher grants open access to authors. Most conferences and journals allow publishing the results after the peer-review period as long as the final copy-editing of the article is kept to subscribers.

All resulting publications (scientific papers, white papers, technical reports, etc.) will include the following acknowledgement sentence:

This work has been partially funded by the European Union through the Horizon Europe CloudSkin project (101092646).

The word "partially" will be removed in all cases that the work is exclusively funded by the project.

4.4.4 Events

An important dissemination channel will be the attendance and presentations at different events, like workshops, and high-level peer-reviewed conferences. Presenting the latest updates of the project at such events, meetings or workshops will be an effective means of involving both the scientific community and industry leaders. All events with CloudSkin participation will be previously announced on the "News" web page and Twitter account and, if necessary, disseminated through partner's social media accounts.

A preliminary list of strategical events where CloudSkin aims to participate is summarize in the Table 2.

Planned month	Type of event	Example of target conference
M6	Internal workshop	-
M12	Open workshop	NSDI
M24	Open workshop	USENIX ATC
M30	Major industrial event	CNCE, PyCon
M36	Final workshop in major conference	USENIX, Middleware

Table 2: Strategic events for CloudSkin



Figure 5: CloudSkin project overview poster.



Figure 6: Screenshot of the CloudSkin Twitter account.

5 Related organisations and projects

As stated in the GA, the project is starting to collaborate with other RIAs/CSAs across HORIZON-CL4-2022-DATA-01-02. The project will exchange information with the other RIA projects of the topic HORIZON-CL4-2022-DATA-01-02 in order to exploit results, synergies and maximize impacts and coordinate dissemination activities of the swarms project portfolio.

As a facilitator to carry out this duty, the CloudSkin project has already joined the EUCloudEdgeIoT.eu community as a member of the Cognitive Cloud working projects (https://eucloudedgeiot.eu/european-research-and-innovation-projects/). Indeed, the project had the opportunity to get in touch with all the projects of the Cognitive Cloud call in the concertation meeting held at Brussels on 10-11 May, as discussed in Section 5.1.Some interesting discussions already arose between some of the projects such as CODECO and COGNIFOG.

In the next months, the project is expected to enroll in some of the six individual task forces, offered by the EUCloudEdgeIoT.eu initiative, such as the task force in communication, namely, TF6 Communication.

5.1 European Concertation and Consultation on Computing Continuum: From Cloud to Edge to IoT

EC, under Horizon Europe's Cluster 4, invited CloudSkin to the "Concertation and Consultation on Computing Continuum: From Cloud to Edge to IoT", taking place on 10-11 May 2023, in Brussels. The event gathered the top players in the European Cloud, Edge and IoT computing. Marc Sanchez-Artigas, CloudSkin's coordinator, represented the project participating in a Pitch Session and a "tour" of rollups of each project (https://eucloudedgeiot.eu/concertation-and-consultation-on-computing-continuum-from-cloud-to-edge-to-iot/). We also prepared a booklet providing information about the project (https://zenodo.org/record/7941579).

The attendees had the opportunity to participate in a tour of the Research and Innovation Action projects. The rollup tour featured interactive sessions where representatives from different projects presented their aims, use cases, and results. The tour allowed participants to gain valuable insights into the latest developments of cloud, edge, and IoT technology and to understand how these projects are shaping the future of these domains.



Figure 7: Screenshot of the Pitch Session for the Cognitive Cloud projects.

The sessions provided an excellent opportunity for networking, collaboration, and knowledge sharing among attendees and project representatives.

5.2 M6 Internal CloudSkin Workshop

One of the planned activities of the project is to organize an internal workshop for M6. Concretely, we decided to celebrate this internal workshop within Jornadas de Concurrencia y Sistemas Distribuidos

(JCSD23) (https://cloudlab-urv.github.io/jcsd2023/) on June 20, 2023, at the Universitat Rovira i Virgili (for further details, we kindly refer the reader to Section 6.2.1).

For what refers to related organizations and projects, we will leverage JCSD23 conference to have meetings with partners of two other projects: the EU Project NEARDATA (Extreme Near-Data Processing Platform, GA 101092644) and the Spanish DALEST (Distributed Analytics and Learning in Edge-to-Supercomputing Technologies) project.

5.3 Cloud-Edge Continuum Workshop 2023

As planned M12 workshop, we are organizing the Cloud-Edge Continuum (CEC) workshop, which will be co-located with IEEE ICNP'23 (see further details in Secion 6.2.2).

A key point of the workshop will be to exploiting shared interests among multiple European projects on similar topics. More concretely, we will organize a poster session within the workshop to share the progress of, at least, the following projects:

- EU Project CloudSkin (101092646)
- EU Project CLEVER (101097560)
- EU Project NEARDATA (101092644)
- EU Project BRAINE (876967)
- EU Project GLACIATION (101070141)
- EU Project SMARTEDGE (101092908)
- EU Project SILVANUS (101037247)
- Irish project CAMEO

Of course, we will continue contacting other projects to encourage them to participate. This will be an effective approach to gather researchers from multiple projects related to cloud-edge environments to share insights and foster collaboration.

6 Activities of the year 1 of the project: M1 to M12

This section presents the all the confirmed events and activities where CloudSkin participated during the first five months of the project (M1-M5) and the planned activities for the rest of the first year (M6-M12).

6.1 Participation in dissemination and communication activities: M1-M5

6.1.1 URV digital newspaper press release

Press releases are one of the most effective ways of communicating particular activities of the project to a specific target audience. A press release in the digital newspaper of the University Rovira i Virgili (URV) announced the kick off of CloudSkin, among other projects targeting cloud computing and artificial intelligence.

The press release (see screnshot in Figue 8) was published online the 25th of January 2023: https: //diaridigital.urv.cat/en/urv-obtains-two-million-euros-promote-four-international-projectscloud-computing-artificial-intelligence/.





CloudLab research group. Its members are experts in cloud technologies and digital transition.

Figure 8: Screenshot of the CloudSkin press release in the URV digital newspaper.

6.1.2 Mobile Word Congress 2023

An important event where CloudSkin was presented is the Mobile Word Congress 2023 (MWC23), one of the major international industrial events, that took place the 27th of February to the 2nd of

March 2023 in Barcelona, Spain.

Two partners, Nearby Computing and DELL, had a booth where the CloudSkin project was disseminated. According to the event organization: *MWC convened over 88,500 attendees from 202 countries and territories, including policymakers and business leaders from the mobile ecosystem and beyond* [3]. Figure 9 shows the CloudSkin presentation at Nearby Computing booth.



Figure 9: CloudSkin presentation at MWC23.

6.1.3 Other activities

Besides the three important activities described in previous sections, consortium partners attended several events and meetings, or write news, blog posts and white papers, where the CloudSkin project was presented. The full list of activities is presented in Table 3.

6.1.4 Publications

The following list presents the accepted CloudSkin scientific publications:

- M. U. Sardar, Christof Fetzer, Confidential Computing and Related Technologies: A Critical Review, at Cybersecurity, 2023.
- Alberto Archetti; Eugenio Lomurno; Francesco Lattari; André Martin; Matteo Matteucci, *Heterogeneous Datasets for Federated Survival Analysis Simulation*, at ICPE 2023.
- Francesc-Josep Lordan Gomis; André Martin; Daniele Lezzi, Securing the Execution of ML Workflows across the Compute Continua, at ICPE 2023.
- P. Gimeno Sarroca and M. Sánchez-Artigas, On Data Processing through the Lenses of S3 Object Lambda, at IEEE INFOCOM'23.

6.2 Planned activities: M6-M12

6.2.1 Internal CloudSkin Workshop

A CloudSkin internal workshop is organized within the Jornadas de Concurrencia y Sistemas Distribuidos (JCSD23) (https://cloudlab-urv.github.io/jcsd2023/) on June 20, 2023 at the Universitat Rovira i Virgili. Figure 10 shows the participants of the JCSD23.

The fundamental objective of these conferences is to publicize the work that the different university departments, research centers, R&D departments and companies in the computer sector are currently developing on issues related to concurrency and distributed systems (concurrent programming, systems in real time, modelling, analysis and control of concurrent systems, languages and architectures, etc.).

Table 3: CloudSkin dissemination and	communication activities (M1-M5).
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Activity	Date and place	Audience type
		and size
FET a Tarragona Magazine,	18 Jan 23 (online)	Citizenship
Interview [4]		
CloudSkin presentation to T-Systems	13 Feb 23 (Berlin, Germany)	Industry (5)
(by TUD)		
CZI Workshop - Metabolism Across Scales	Feb 23 (San Francisco, USA)	Scientific
		community (50)
CloudSkin presentation to Radia Perlman	6 Mar 23 (Cork, Ireland)	Industry (10)
(by DELL)		
CloudSkin presentation to T-Systems	8 Mar 23 (Tarragona, Spain)	Industry (8)
(by URV)		
CloudSkin presentation to Arsys	15 Mar 23 (online)	Industry (3)
(by URV)		
CloudSkin presentation at CISPA Helmholtz	15 Mar 23	Scientific
Center for Information Security	(Saarbrücken, Germany)	community (15)
CloudSkin presentation to Telefonica	21 Mar 23 (online)	Industry (5)
Research (by URV)		
Regional Mass Spectrometry Imaging	27-29 Mar 23	Scientific
Spring Workshop [5]	(Uppsala, Sweden)	community (150)
2023 Annual Meeting of the Working Group	28-30 Mar 23	Scientific
"Formal Methods for Security" [6]	(Roscoff, France)	community (20)
Projektcafé EKFZ - TU Dresden	30 Mar 23 (Dresden,	Scientific
CloudSkin presentation	Germany)	community (50)
CloudSkin White Paper for Dell	30 Mar 23 (DELL internal)	Scientific and
research office		industry (+200)
IEEE ComSoc CSIM-TC newsletter,	May 23 (online)	Scientific
CloudSkin presentation [7]		community (+1000)
CloudSkin presentation to Xartec Salut [8]	12 May 23 (online)	Health network (3)
(by URV)		
CloudSkin presentation to UKHD	16 May 23 (online)	Scientific
		community (3)
Pravega in European Research Projects	6 June 23 (online)	Citizenship
(blog post) [9]		

This type of meeting constitutes an excellent opportunity to establish cooperation links between the different research groups of the different Spanish universities. This cooperation usually translates later into the coordinated request for funding in joint research projects. The Conferences also constitute an excellent forum for industry and research centers to meet and exchange interests and opinions.

On the other hand, conferences of this type give new researchers the opportunity to make their



Figure 10: Participants to the JCSD23.

first research works known to the national community in an event that is already consolidated at the national level.

6.2.2 M12 open workshop: Cloud-Edge Continuum Workshop 2023

Date and location: October 10th 2023. Reykjavik, Iceland.

We are going to organize a workshop, namely Cloud-Edge Continuum (CEC) workshop, to be co-located with IEEE ICNP'23 (https://cec23.github.io). The workshop topics of interest clearly align with CloudSkin objectives (e.g., network optimizations, novel system architectures, securi-ty/privacy, AI-enabled resource allocation, for the Cloud-Edge Continuum). DELL is supporting the organization of this workshop. This implies that the workshop will benefit from DELL's leading role in the technology sector and its marketing resources to maximize its impact. Concrete planned dissemination tasks include social media posts, generation of marketing material for the workshop, and internal talks to create awareness within DELL's engineering and research community.

The workshop is expected to be a full day event. We expect to receive around 20 paper submissions and around 8 (40%) of the highest quality will be accepted. We also expect 2 keynote speakers to attend the workshop. Our current efforts are focused on disseminating the workshop to attract the highest number of high quality submissions. We have already used the mailing lists, social media, and web pages of multiple EU projects. We have also achieved to publicize the workshop in the EUCloudEdgeIoT site, as visible in Fig. 12. We will also leverage on the strong Program Committee that we have built for publicizing the workshop and attracting paper submissions: it is formed by 34 members, most of them being senior researchers and experienced industry leaders from multiple organizations, including Dell Technologies, Imperial College London, IBM, NVidia, Oxford university, and Intel, among others.



Figure 11: Screenshot of the IEEE ICNP'23 conference referring to the CEC'23 Workshop.



Figure 12: Screenshot of the EUCloudEdgeIoT site referring to the CEC'23 Workshop.

7 Conclusions

This document presents the CloudSkin dissemination and communication plan that aims to maximize the impact of the project. The document also reports a number of activities run or planned during the project, in order to guarantee broad visibility of the project's work and results in the related domains and beyond so as to engage target stakeholders and produce relevant and durable impact.

The work of WP6 will continue to be intensive in the upcoming months as several efforts are planned in order to support the broad and effective promotion of various CloudSkin-driven activities.

References

- [1] V. Ruana and M. Sánchez, CloudSkin project. D1.2 Management Plan. Confidential, 2023.
- [2] V. Ruana, "CloudSkin project. D1.1 Public Project Website." https://cloudskin.eu/assets/ deliverables/CloudSkin_D1.1_Public.pdf, 2023. Accessed: 2023-05-22.
- [3] "A resurgent mwc barcelona 2023 brought debate, inspiration and business deals for the mobile ecosystem." https://www.mwcbarcelona.com/press-releases/a-resurgent-mwc-barcelona-2023-brought-debate-inspiration-and-business-deals-for-the-mobile-ecosystem. Accessed: 2023-05-11.
- [4] P. Garcia, "Artificial intelligence to save lives." https://cloudskin.eu/assets/deliverables/ Fet-a-Tarragona_Num58_Mar-Abr2023_IA-per-salvar-vides.pdf. Accessed: 2023-04-01.
- [5] "Regional mass spectrometry imaging spring workshop." https://www.apotekarsocieteten. se/produkt/regional-mass-spectrometry-imaging-spring-workshop/?lang=en. Accessed: 2023-05-11.
- [6] "2023 Annual Meeting of the WG Formal Methods for Security." https://gtmfs2023. sciencesconf.org/.
- [7] "IEEE ComSoc communications systems integration and modeling technical committee newsletter." http://site.ieee.org/tc-csim/files/2023/05/CSIM-Newsletter-Spring-2023. pdf. Accessed: 2023-05-11.
- [8] "Xartec Salut." https://xartecsalut.com/.
- [9] R. Gracia, "Pravega in European Research Projects." https://cncf.pravega.io/blog/2023/06/ 06/pravega-in-european-research-projects/.