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Resumen ejecutivo

Este documento presenta un informe completo sobre las actividades y logros de los subproyectos de 6G-RIEMANN en 2022 en relación con la comunicación y la difusión. Como los subproyectos están interrelacionados, se decidió combinar los informes individuales de cada subproyecto en un solo documento.

En 2022, experimentamos algunos retrasos en la puesta en marcha de todas las actividades debido al proceso de licitación. A pesar de esto, hemos logrado un progreso significativo, que incluye una contribución de artículo y una tesis doctoral en curso.

Abstract

This document presents a comprehensive report on the activities and accomplishments of the 6G-RIEMANN subprojects in 2022 in relation to communication and dissemination. As the subprojects are interrelated, it was decided to combine the individual reports of each subproject into a single document. In 2022, we experienced some delays in bootstrapping all activities due to the tender process. Despite this, we have achieved significant progress, which includes one paper contribution and an ongoing PhD thesis.

1. Introduction

The use cases for 6G networks will heavily rely on data processing. Although encryption techniques ensure data integrity, privacy preservation when data is processed between different tenants remains a challenge. This is a common issue for many solutions built on top of 6G and integrated natively into the network architecture, such as data exchanges between network service providers and operators.

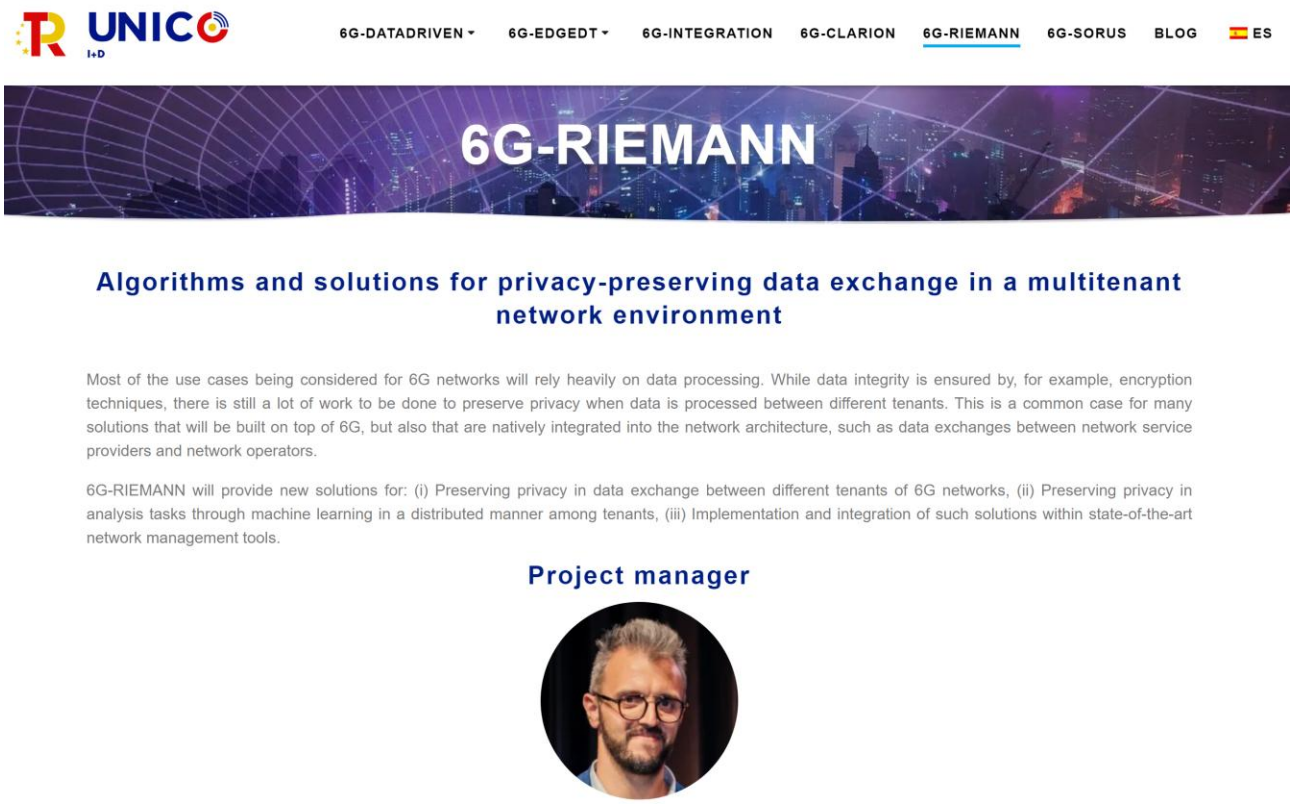
To address this challenge, the 6G-RIEMANN project aims to provide new solutions for preserving privacy in data exchange between different tenants, preserving privacy in analysis tasks through distributed machine learning, and integrating these solutions into state-of-the-art network management tools.

The project is contributing to various groups of activities, including communication, dissemination, and exploitation. Communication activities aim to promote the project and its results beyond the project's own community, while dissemination activities focus on presenting the results in the technical community through peer-reviewed publications, technical events, exhibitions, and technology demonstrations. Exploitation activities involve using the results for further research activities, developing and marketing products or processes, providing a service, or participating in standardization activities.

To achieve its objectives, the 6G-RIEMANN project has been structured into four subprojects, namely -DS, -ML, -SI, and -FR.

2. Communication activities

At the start of the project, a website was established and is accessible via the URL: [6G-RIEMANN – UNICA 6G (uc3m.es)](). The landing page for the website is depicted below.



3. Dissemination activities

The integrated 6G-RIEMANN project has been officially acknowledged in the following papers, which have been accepted for publication in 2022.

- M. Allegretta, G. Siracusano, R. Gonzalez, P. Vallina and M. Gramaglia, "Using CTI Data to Understand Real World Cyberattacks," 2023 18th Wireless On-Demand Network Systems and Services Conference (WONS), Madonna di Campiglio, Italy, 2023, pp. 100-103, doi: 10.23919/WONS57325.2023.10061921.

The following PhD theses related to the project are currently in progress.

- “AI powered analysis of ICT infrastructures: Cybersecurity and performance”. Mauro Allegretta Expected Finalization date: Mar 2025