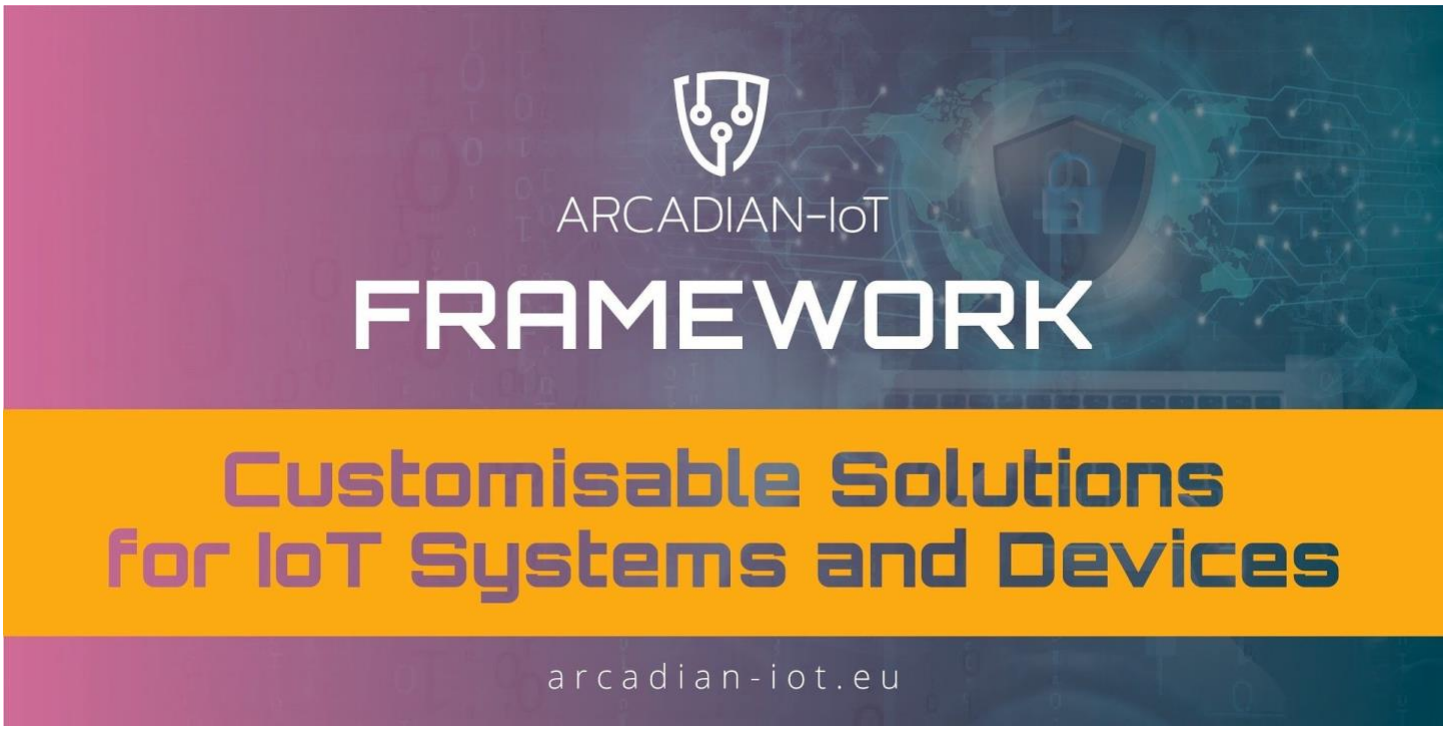

PRESS RELEASE

ARCADIAN-IoT announces the framework for IoT Security and Privacy

ARCADIAN-IoT project is proud to announce its latest advancements in IoT security and privacy through its comprehensive and innovative framework. This announcement marks a significant milestone in the project's ongoing efforts to enhance the security, privacy, and resilience of IoT ecosystems across Europe.

The ARCADIAN-IoT framework introduces a suite of solutions designed to address the most pressing challenges in IoT security and privacy. Among these innovations is the Self-aware Data Privacy (SADP) component, which empowers users to define and enforce their own privacy policies. This component leverages advanced encryption techniques and privacy-preserving algorithms to ensure that user data remains secure and private, even in the face of sophisticated cyber threats.

Another key innovation within the ARCADIAN-IoT framework is the integration of Federated AI for decentralized machine learning. This technology enables the secure and efficient processing of data across multiple IoT devices without the need to centralize data storage. By distributing the computational load and ensuring that data remains localized, Federated AI enhances both the security and efficiency of IoT networks, making them more resilient to attacks and failures.

In addition to these privacy and AI advancements, ARCADIAN-IoT has developed robust cybersecurity features to safeguard IoT ecosystems. The Network Flow Monitoring and Device Behaviour Monitoring components provide real-time detection and mitigation of cyber threats. These features use state-of-the-art machine learning algorithms to analyze network traffic and device behavior, identifying anomalies and potential security breaches before they can cause significant harm.

The ARCADIAN-IoT framework also incorporates blockchain technology to enhance the security of data transactions and identity management. By leveraging the immutable and transparent nature of blockchain, ARCADIAN-IoT ensures that all data exchanges within the IoT ecosystem are secure and verifiable. This technology not only enhances trust among IoT devices but also provides a reliable means of tracking and auditing data flows, thereby improving overall system integrity.

One of the features of the ARCADIAN-IoT framework is its emphasis on user-centric security. The framework includes user-friendly interfaces and tools that allow individuals to easily manage their privacy settings and monitor the security of their IoT devices. This focus on user empowerment is a testament to ARCADIAN-IoT's commitment to creating secure and transparent IoT environments that respect user autonomy and privacy.

ARCADIAN-IoT's innovations are the result of extensive collaboration with all the partners in the project, experts in the cybersecurity and IoT fields. The project has benefited from the insights and expertise of a diverse consortium of partners, including academic institutions, research organizations, and industry leaders. This collaborative approach has enabled ARCADIAN-IoT to develop solutions that are both technically robust and practically applicable to real-world IoT scenarios.

For more information on ARCADIAN-IoT's innovations please visitARCADIAN-IoT Innovations.

About ARCADIAN-IoT

ARCADIAN-IoT is a three-year Research & Innovation project funded by the European Union's Horizon 2020 programme under Grant agreement n° 101020259. The ARCADIAN-IoT project is powered by a strong consortium and relies on multidisciplinary partners with expertise in cybersecurity, IoT systems, encryption, data privacy and recovery mechanisms. The ARCADIAN-IoT consortium is coordinated by Instituto Pedro Nunes (Portugal). The members of the consortium are: ATOS IT Solutions and Services (Spain), E-Lex Studio Legale (Italy), Load Interactive (Portugal), Martel (Switzerland), RGB Medical Devices (Spain), RISE - Research Institutes of Sweden (Sweden), BOX2M Engineering (Romania), 1Global (Portugal), Universidad de Navarra (Spain), University of West Scotland (UK), XLAB (Slovenia).

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