

European cross-border digital services with OSS

**ESOP & Open Source Sweden** 

Paulo Ribeiro, 23<sup>th</sup> of February, 2022

# Agenda

## Linkare's presentation

**European Commission OSS Building Blocks** 

Linkare

A practical example

#### WHO WE ARE

#### Mission

Our mission is to innovate and excel in the creation and development of solutions and services, adopting emerging Java and open source technologies that boost business' grow, transformation and competitiveness.

## Foundations

- · Java Excellence
- · Talented Skilled Professionals
- · Ecademy
- $\cdot$  Facing Innovation Together

# **History**

<b>2018</b> Linkare Belgium is established [ <i>branch</i> ]
<b>2017</b> New site dedicated to Innovation and nearshore services located in Coimbra, Portugal
2015 Office in Brussels is established
<b>2012</b> First nearshore & offshore projects
2010 International activity began with on-site services to European institutions in Brussels, Belgium
2004 Created in Portugal with one motto: Java Excellence!







## Custom made solutions



**Enterprise systems** 



Web & mobile apps



**Portals & intranet** 



eID (eIDAS) & eSignature



Forms & simulators



Open & big data



eDelivery



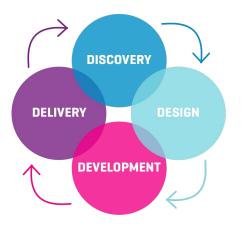
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**Systems integration** 

#### WHAT WE DO

# Services that empower your digital transformation



- End-to-end projects -



#### Innovation

Leverage digital technologies that enable the innovation of your business and operating models



#### UX/UI design

Integrating UX and UI design to develop an unique user experience with your products and services



#### **IT Consulting**

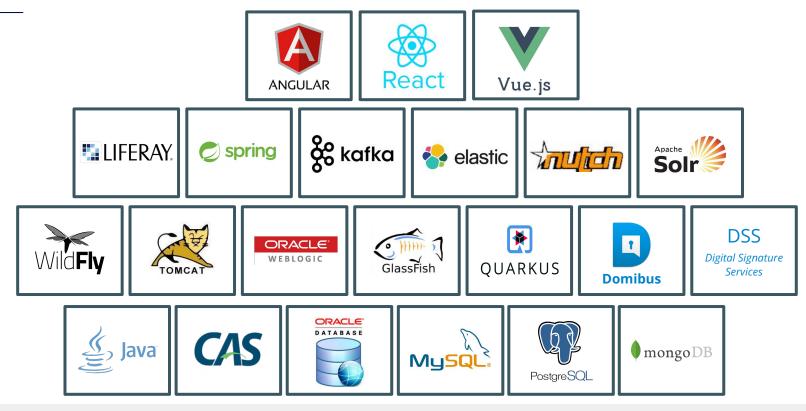
Studies, advice, assessment and software quality assurance



**DevOps + Cloud** 

Speedy delivery to meet your business needs, running containers and with Continuous Integration & Delivery over your cloud / datacenter

#### MAIN TECHNOLOGIES







# **Belgium**



**Square de Meeûs 40** Close to the European Parliament



# Portugal



**City center** 20 minutes away from the Lisbon Airport



**University Incubator** Top technical university in Portugal

#### WHERE WE ARE

#### **Customers & Partners**

Angola Austria Belgium France FInland Germany Greece Ireland Italy Mozambique Netherlands Poland

Portugal

Spain

United Kingdom

#### **Businesses**

Banking & Financial Services, Energy, Logistics, Telco & Media and others

#### **Public administration**

Social security, justice, finance, healthcare, governmental agencies

#### Innovation

International consortia for innovation projects in IT

#### **European institutions**

European Parliament European Commission European agencies

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# **European Commission OSS Building Blocks**

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# **Building Blocks**

"A Building Block is an open and reusable digital solution. It can take the shape of a **framework**, a **standard**, a **software**, or a software as a service (**SaaS**), or any combination thereof."

Building Blocks are endorsed by the European Commission (EC) and ensure that your digital service will be fully compatible with others on the market. EC offers support and guidance on your journey to an interoperable, EU-compliant final product or service.



### DIGITAL EUROPE

source code documents & specs test suites support

Source:

https://ec.europa.eu/digital-building-blocks/wikis/display/DIGITAL/Digit

#### al+Homepage

# **5 Building Blocks & other Open Source Software**



#### eDelivery

Exchange electronic data and documents in an interoperable and secure way



elD

Offer services capable of electronically identifying users across Europe



#### **Once Only Principle**

Reduce administrative burden for individuals and businesses



#### elnvoicing

Send and receive electronic invoices with automated processing, in line with the European standard



#### eSignature

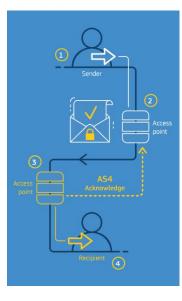
Create and verify electronic, paperless signatures





# eDelivery

Exchange electronic data and documents in an interoperable and secure way



# **Our experience**

Linkare has experience in implementation, configuration and customization of **eDelivery Access Points & Connectors.** 

Projects:

- e-CODEX / e-Codex Plus: provides easy access to cross-border justice all over Europe:
  - Small Claims
- eEvidence cross-border access to electronic evidence in criminal investigations
- BRIS Business Registers Interconnection System

#### And beyond:

- Participated in the development of the File System Plugin for the Domibus eDelivery Access Point
- Domibus dockerization & Testing Automation implementation



#### elD

Offer services capable of electronically identifying users across Europe

"*eID* is a set of services provided by the European Commission to enable the mutual recognition of national electronic identification schemes (eID) across borders. It allows European citizens to use their national eIDs when accessing online services from other European countries."

- eIDAS Node Providers
- eIDAS Attribute Providers
- Public and Private Service Providers

# **Our experience**

Linkare helped several agencies of the Portuguese public administration integrating **Authentication and eID compatible with the eIDAS**.

Projects:

- Portuguese Government Portals: Justice, Social Security, Culture, National Institute for Industrial Property
- Financial Service Providers

#### And beyond:

 Participating in the development of the automated test bed for eIDAS validation by the Central Services.



eSignature

Create and verify electronic, paperless signatures

"**eSignature** is a set of free standards, tools and services that help public administrations and businesses accelerate the creation and verification of electronic signatures that are legally valid in all European Member States."

# ASSINARE

# **Our experience**

Linkare holds significant experience in implementation and integration of **eSignature applications** using the Digital Signatures Service (DSS).

#### Projects:

- Justice Portal, wide range of services
- Oney Bank Portugal
- ...

#### And beyond:

- Contributions for the CEF DSS solution
- Expert report on the state-of-the-art of eSignature solutions, for the European Parliament.
- Linkare developed its own eSignature solution
  Assinare.



# elnvoicing

Send and receive electronic invoices with automated processing, in line with the European standard

"*elnvoicing* is a digital solution that enables public sector contractors and companies to receive and process electronic invoices, according to the European standard (EN 16931)."

- Faster payment
- Boosting B2G eProcurement
- Facilitating cross-border trade

# **Our experience**

Linkare recently started a project for the implementation of 2 eDelivery access points with the eSPap, the Entity for Shared Services of Portuguese Public Administration, in accordance with **EU's elnvoicing directive and standards**.

Linlare's role:

- Coordination of the application for funding
- Support to Project Coordination
- Support to Requirements analysis
- Support to Design of systems' Architecture
- Support on implementation of Access Point
- Implementation of SMP (Service Metadata Publishing)
- Quality Assurance
- Testing Compliance with Central Services

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#### eINVOICING

# **FE-AP elnvoicing**

#### Status: Ongoing

#### **Participants:**

- Entidade de Serviços Partilhados da Administração Pública, I.P. (eSPap)
- Linkare, TI



#### **Building Block: eInvoicing**

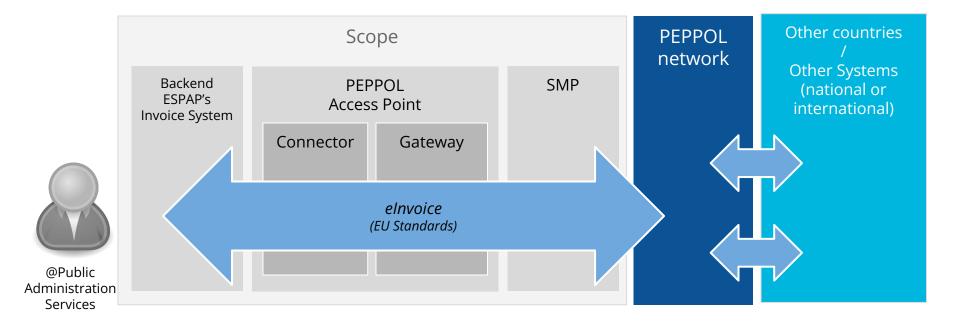
Under the Scope of PEPPOL network.

elnvoicing

🕸 Peppol

#### **Objectives:**

- Connect eSPap to the PEPPOL elnvoicing network:
  - Establish a PEPPOL Access Point for eSPap
  - Implementation of a PEPPOL SMP
- Implement support to the EU elnvoicing Standards in eSPap systems
  - EU Standard: EN16931
  - Syntaxes: ISO UBL2.1 and CEFACT CII
  - Compliance with Directive 2014/55/EU



# linkare



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#### **PORTUGAL** +351 213 590 623 <u>www.linkare.pt</u>

LISBON Av. 5 de Outubro 77, 1º Esq. 1050-049 Lisboa, Portugal

COIMBRA Rua Pedro Nunes, Edifício C 3030-199 Coimbra, Portugal BELGIUM +32 456 11 23 11 www.linkare.be

BRUSSELS Square de Meeûs 40 1000, Brussels you@linkare.com www.linkare.com