

# CISE Generic Adaptor

## *Implementing services*

4<sup>th</sup> CISE Open Day

VTC / 11 December 2025



The Problem

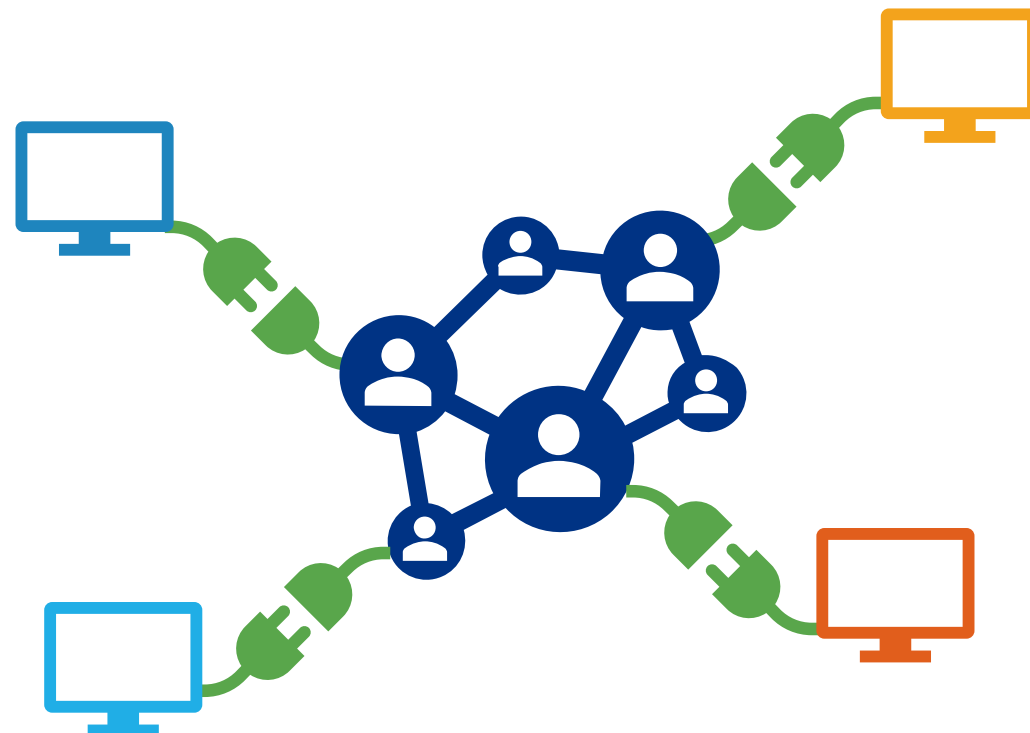
The Idea

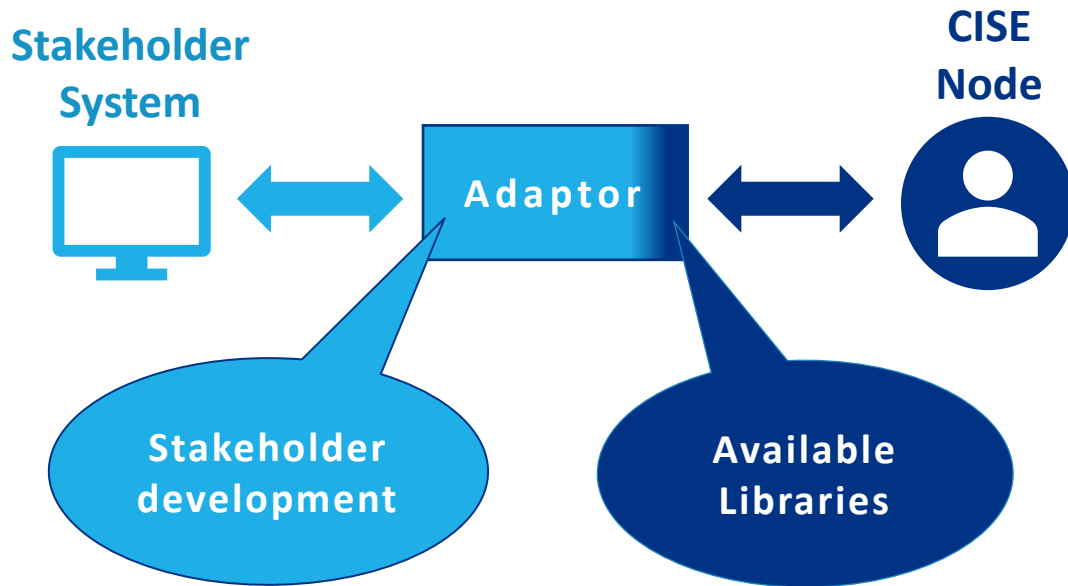
The Solution

How it works

Now in 2025

Arriving in 2026



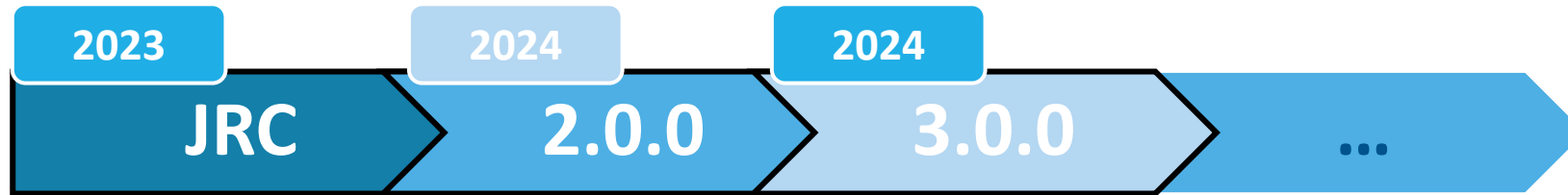


- Available libraries reduce adaptor development effort but not enough
- CISE Stakeholders still need to handle CISE Node communication and common tasks
- CISE Stakeholders need to maintain the evolution and security updates

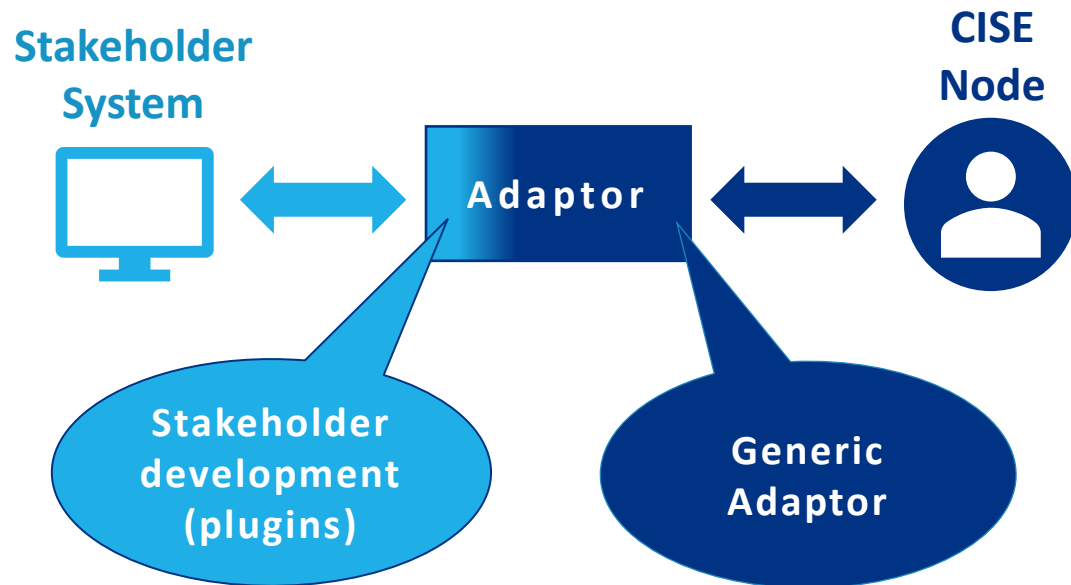
- CISE Generic Adaptor

- **Goal:** Reduce effort of stakeholders to implement adaptors
- **How:** Out-of-the-box handling CISE Node communication and common tasks
- **Stakeholders:** Focus on communication with their system and Business - CISE data translation
- **Expected Result:** More services available



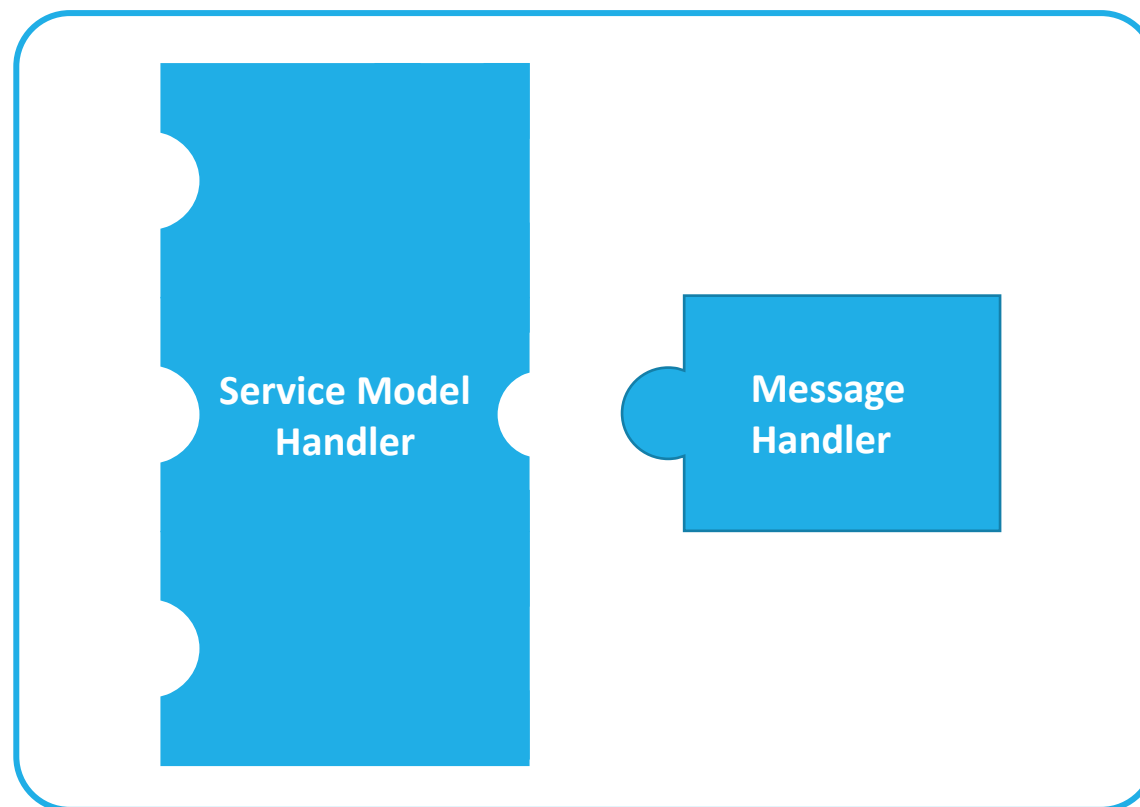


- Plugin based CISE Generic Adaptor
  - Created by JRC in 2023
  - [Version 2.0.0](#) (2024/04/29): First public release
  - [Version 3.0.0](#) (2024/07/23): Support for mTLS; Access to CISE Node API

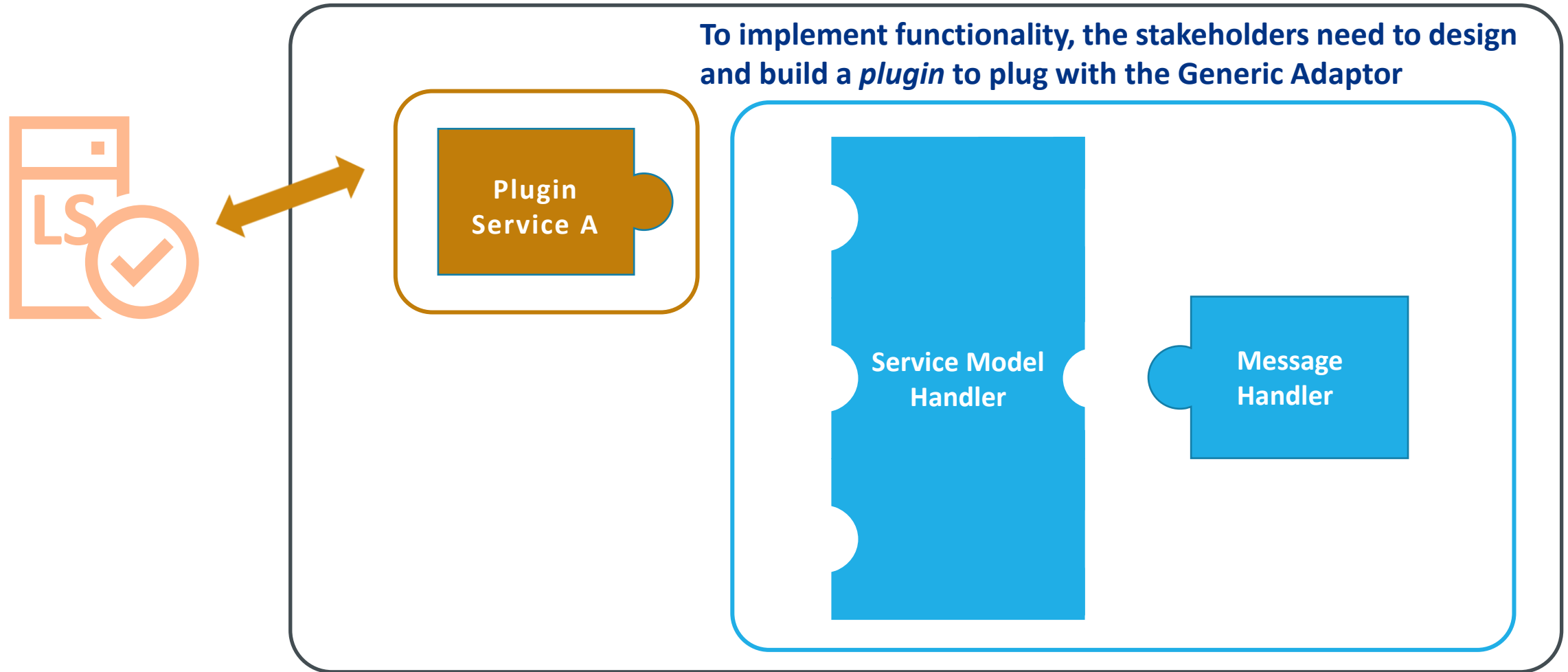


- All CISE Node communication and Signature operations already handled
- Evolutive maintenance and security updates of common blocks included
- Based on CISE well-known technologies to minimize learning curve of plugin developers
- Stakeholder focus on system-adaptor communication and business translation using tailored plugins

**Standalone application (provided to the stakeholder)**

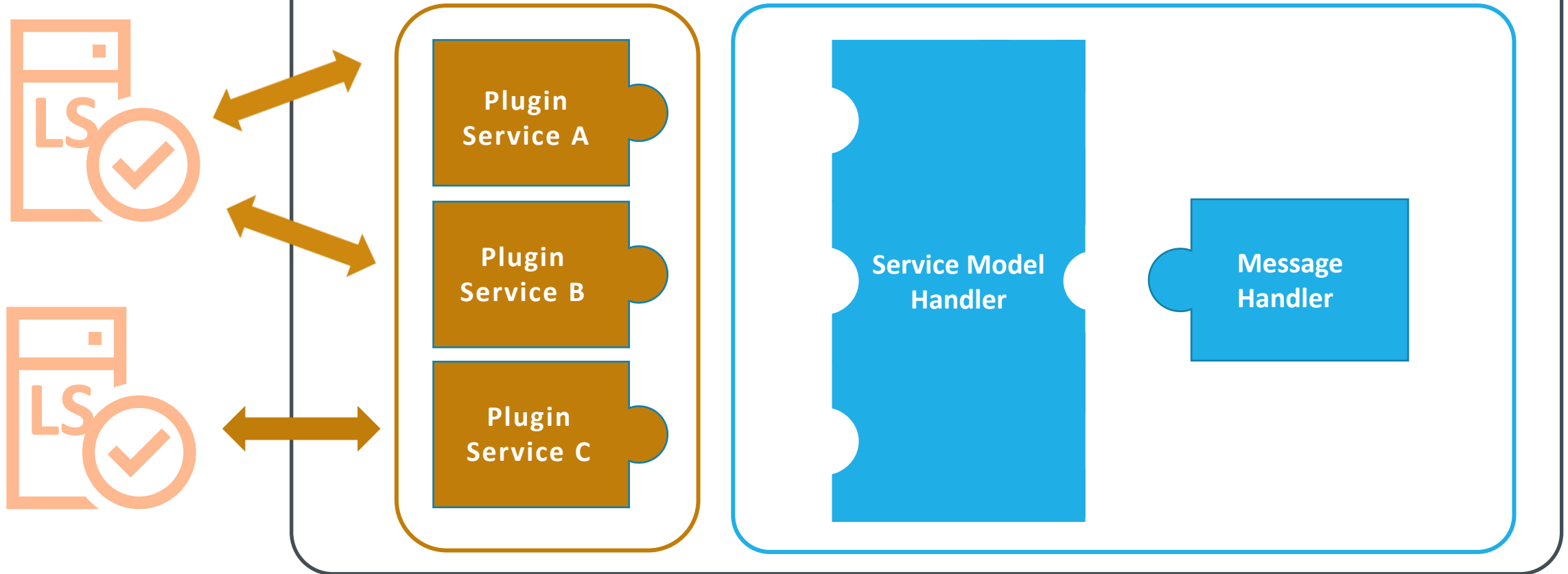








With more plugins, a single Generic Adaptor can provide additional services and/or connect to multiple systems

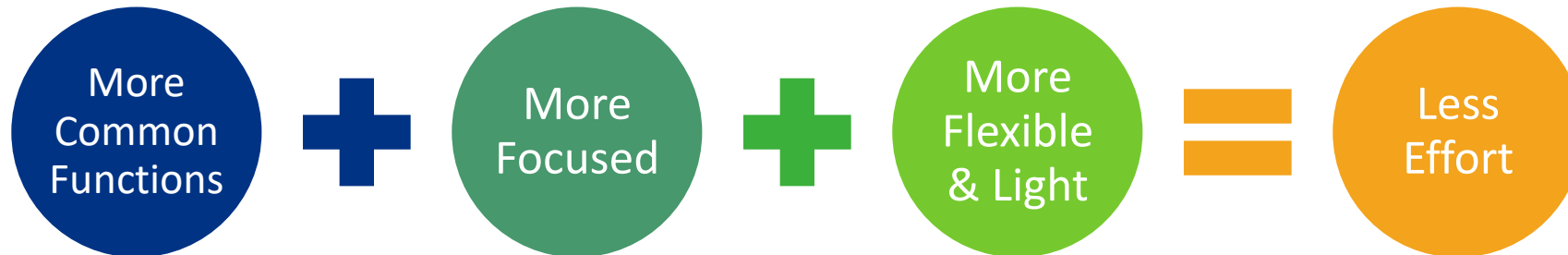


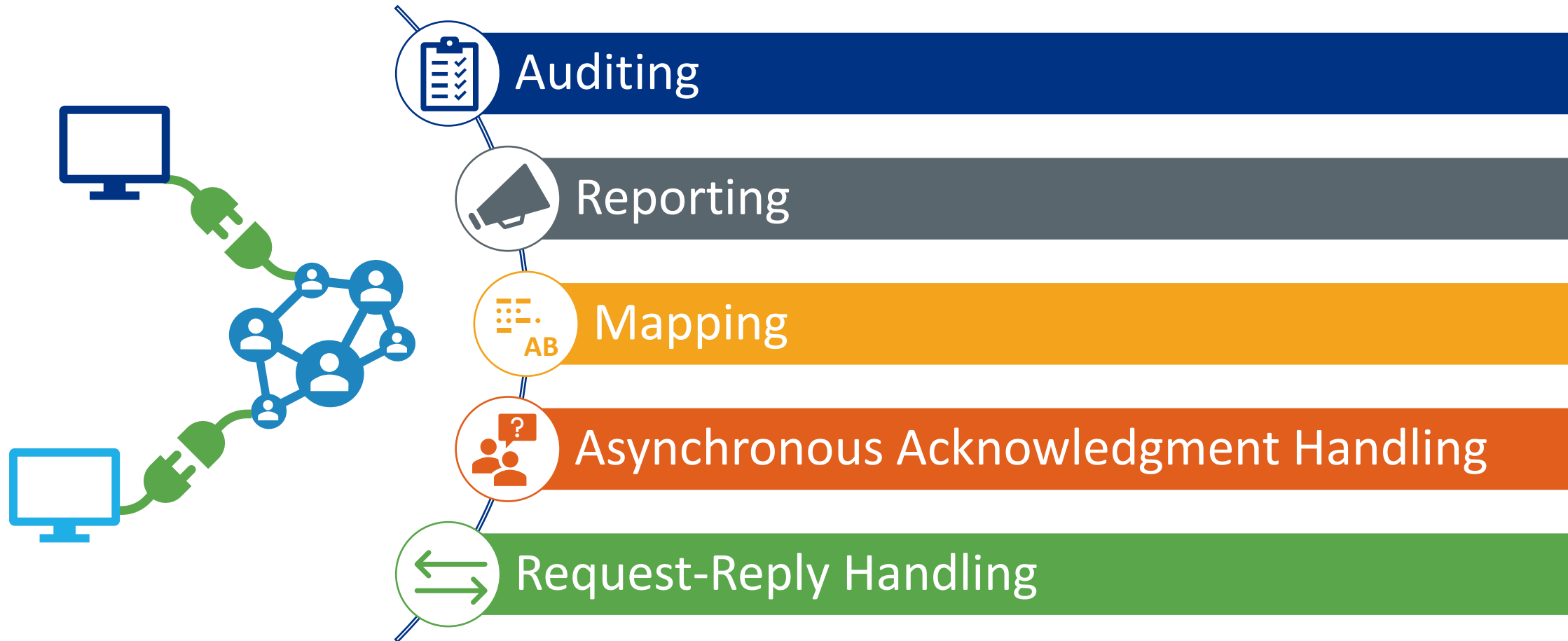


- **Available to the stakeholders on 2025/12/05**
- **Technological upgrade (no new features)**
  - Java Upgrade
  - Dependencies Update
  - Security Updates
- **No evolutive maintenance costs for the stakeholders**



## Taking the Generic Adaptor concept even further





- **Presenting the Abstract Plugin**

- Plugin “chassis”
- Interface with Generic Adaptor

- **Plugin templates**

- Implement CISE Communication Patterns

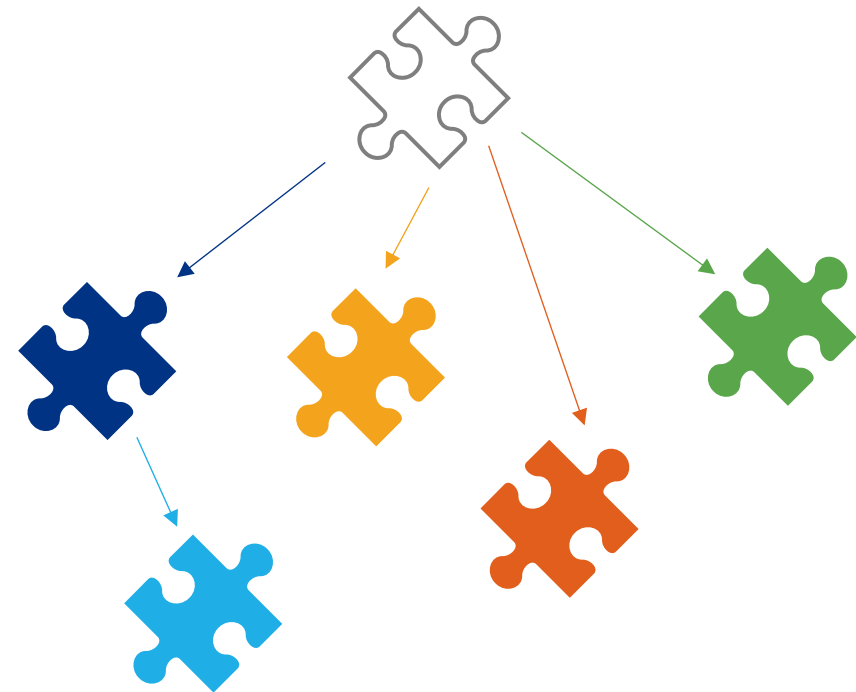


Push

Request  
Reply

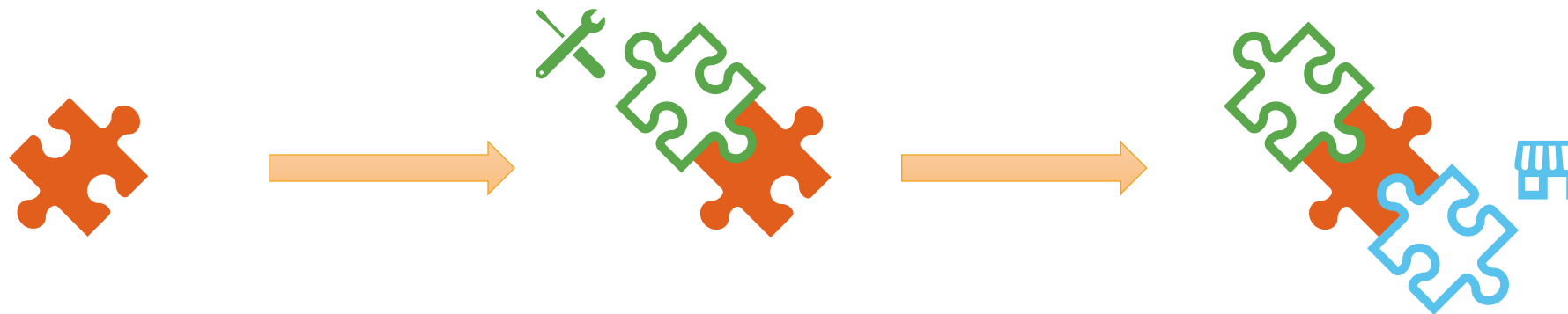


Publish  
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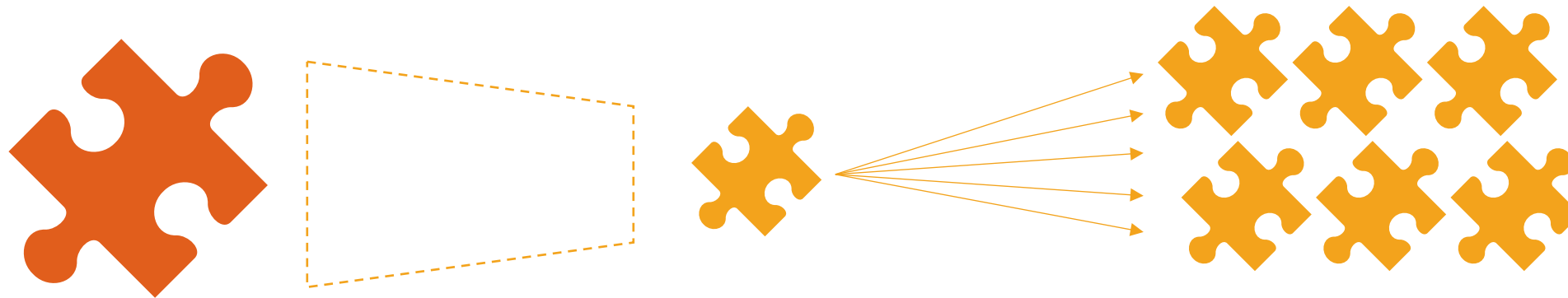
- **Stakeholder tasks to implement a service**

- Select a plugin template according to service communication pattern
- Implement the component for mapping between CISE and their business data model
- Reuse/Implement the component for interacting with their system



- **Smaller Plugins**

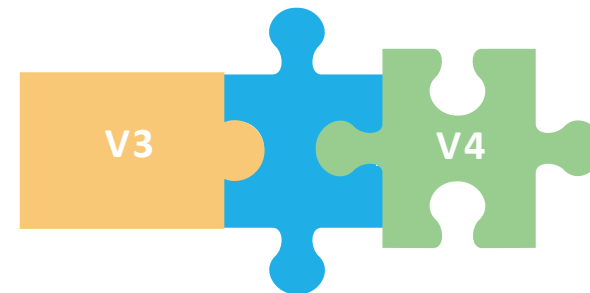
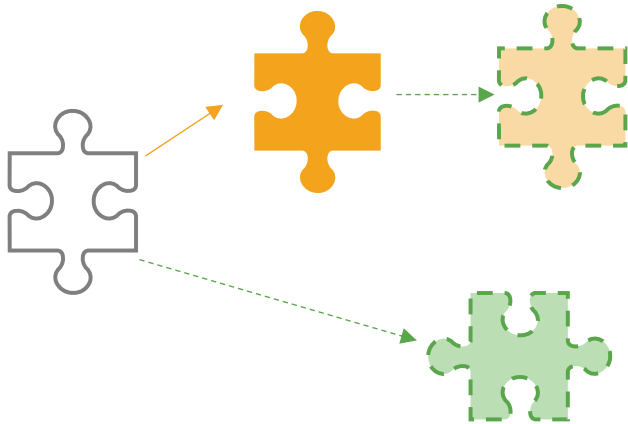
- Simplified development project for implementing plugins
- Single direct dependency





- **Flexible**

- Prepared for handling multiple CISE standard services in same plugin, allowing for CISE Operational Service plugins, such as the Vessel of Interest List
- Stakeholder can extend the Abstract Plugin or one of the plugin templates to implement their own complex services
- Compatible with existing plugins









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