Business Process as a Service BPaaS Offer

Training Material

funded by EC in H2020

CloudSocket

Description of Business Process as a Service
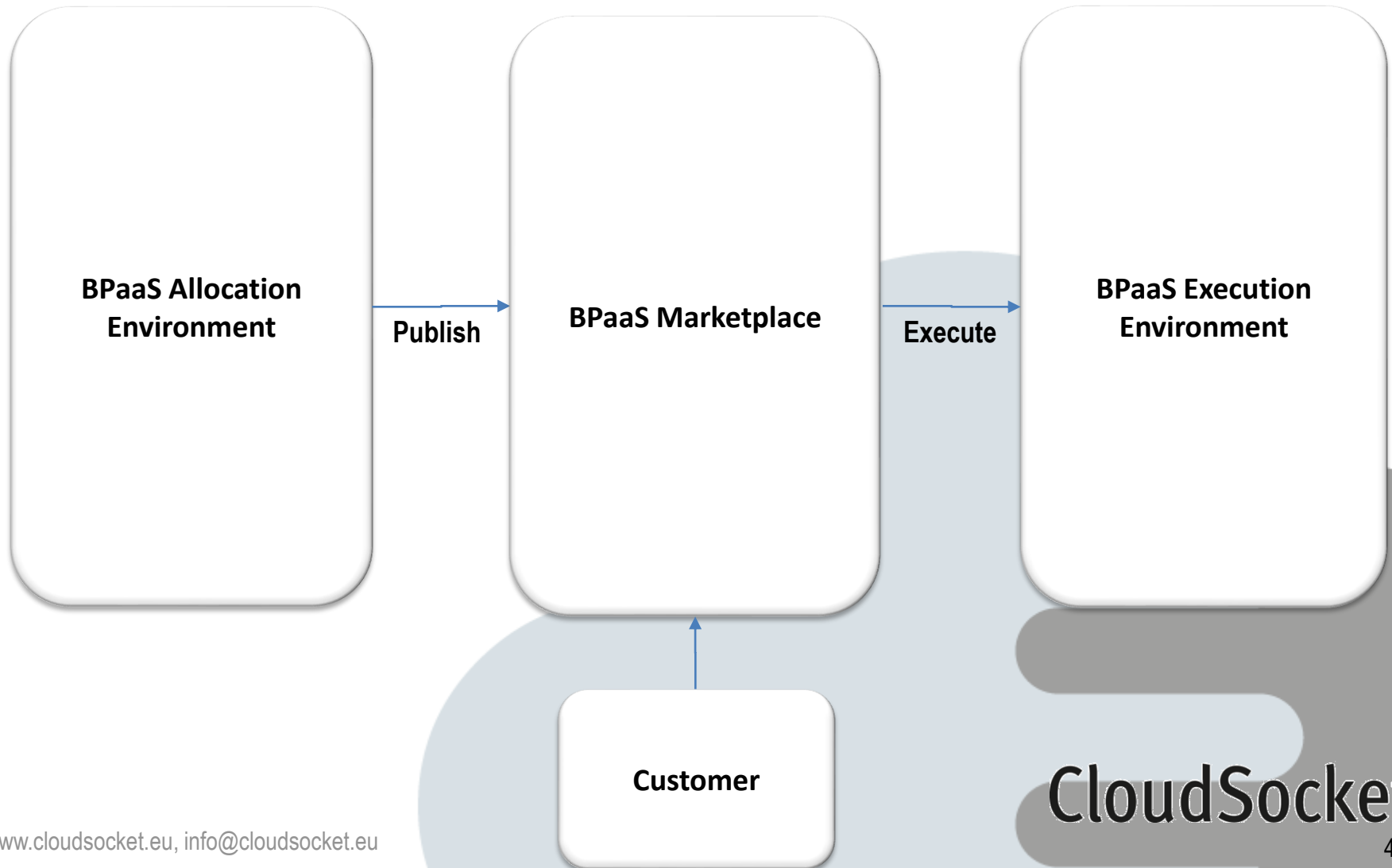
CloudSocket needs a place to offer BPaaS products.

MOTIVATION

CloudSocket

BPAAS MARKETPLACE

| BPaaS Allocation Environment | → Publish → | BPaaS Marketplace | → Execute → | BPaaS Execution Environment |

Customer → BPaaS Marketplace

CloudSocket

Tool Presentation

MARKETPLACE

CloudSocket

BPAAS MARKETPLACE

BPAAS MARKETPLACE

Marketplace modules

- Registration
- Shopping
- Broker
- Administration
- Payment

Address:
http://csmarket.ymens.com
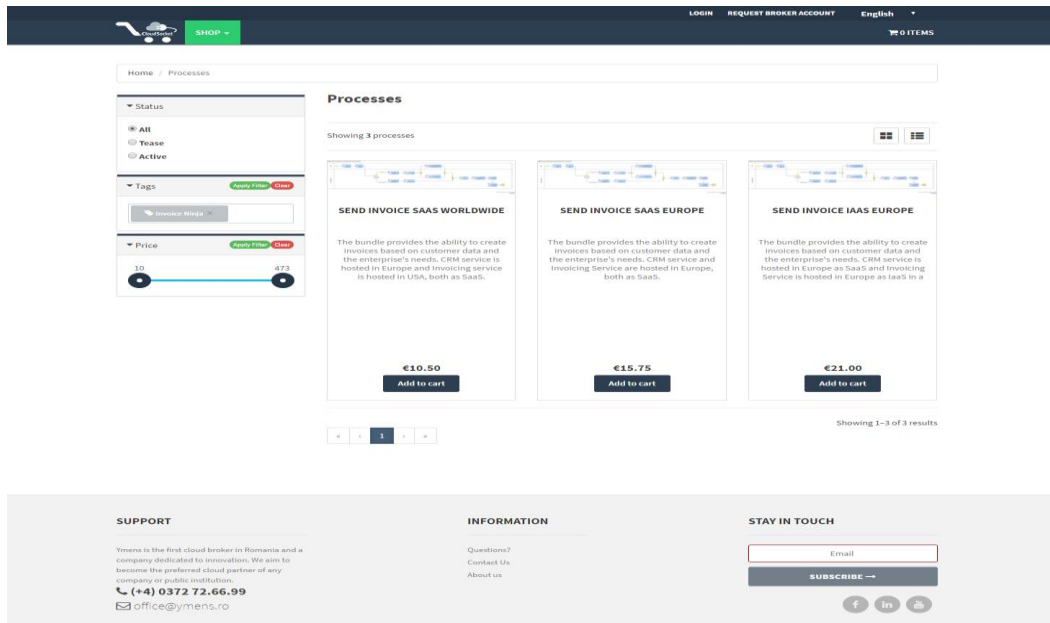
Mobile demo:
https://youtu.be/dwAi7wTf47k
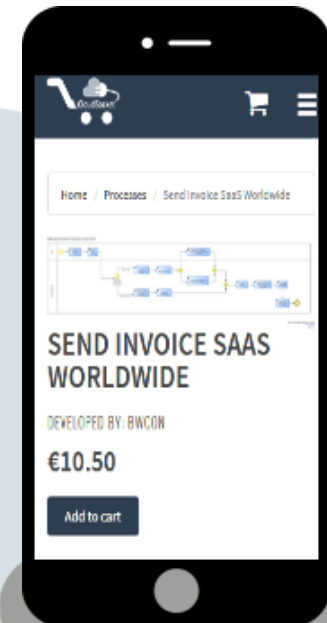
CloudSocket

REGISTRATION MODULE

1. The Broker requests account

2. The Sistem Administrator approves broker request and creates the account

SHOPPING MODULE

The User can **search for BPaaS Bundles** either manually or use filtering:
- Status filter: **all, tease, active**
- Tags filter: using tags from the bundle description
- Price filter: by setting the price interval
- Business needs category filter

Buying a bundle:
- Only Active bundles can be bought: **Add to cart**
- After this, the user goes to shopping cart and **Checkout**s
- Pays using Paypal or Bank order

Bundles with status Tease have an **I want it** button that facilitate starting a discussion with the broker

Demo of user Susan Smidt buying a Send Invoice IaaS Europe bundle: https://youtu.be/GeDKVHqXpbY

BROKER MODULE

The Broker administration has the following
functionality:

1. View the list of products offered by their organizations in the
   Admin tab
2. View daily or monthly statistics for bought bundles
3. View the users belonging to their companies
4. View reports of the products sold between 2 dates
5. View the tools used by their managed companies

CloudSocket
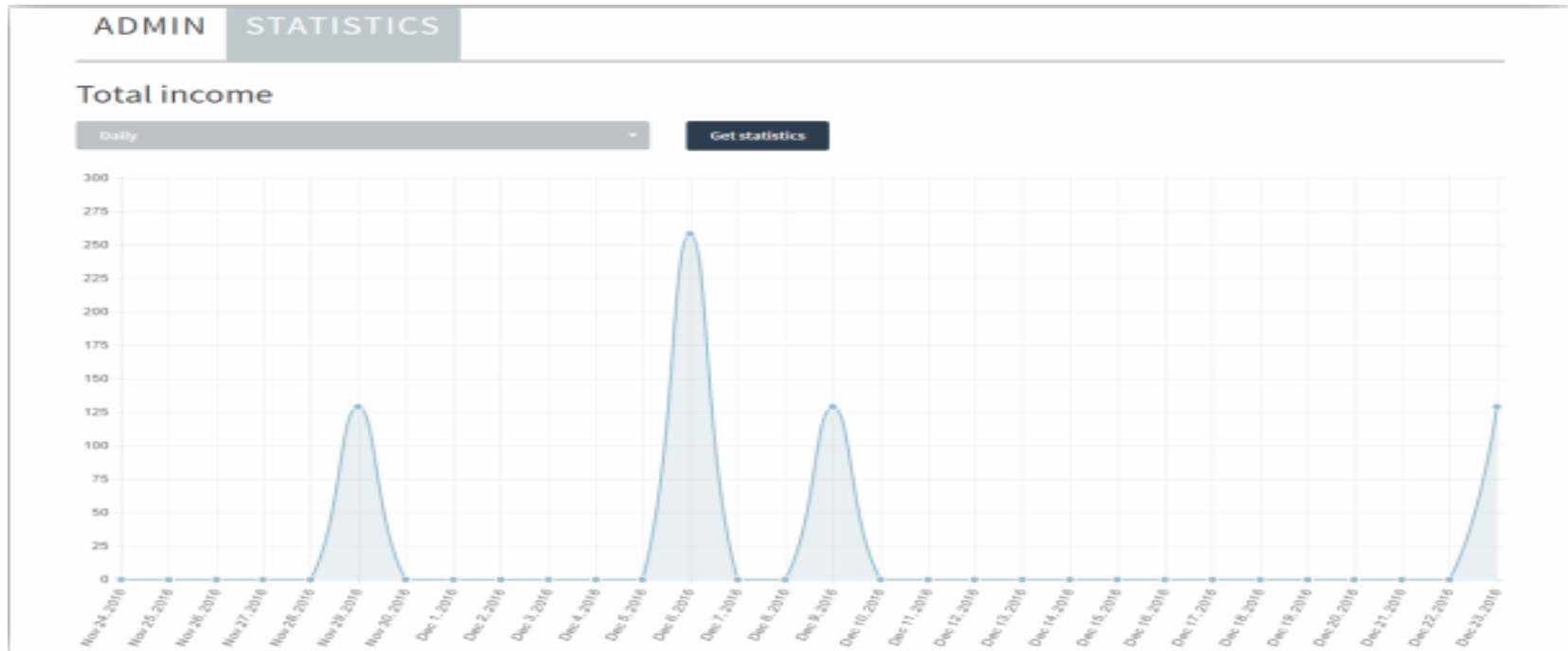
ADMINISTRATION MODULE

The system administration module has the following functionality:

1. View the list of all users in the system – **Users** menu
2. Manage broker account requests – **Users Requests** menu
3. View all the orders made in the system and also statistics for the bundles sold – **Orders** menu
4. Register the bank order payments – **Payments** menu
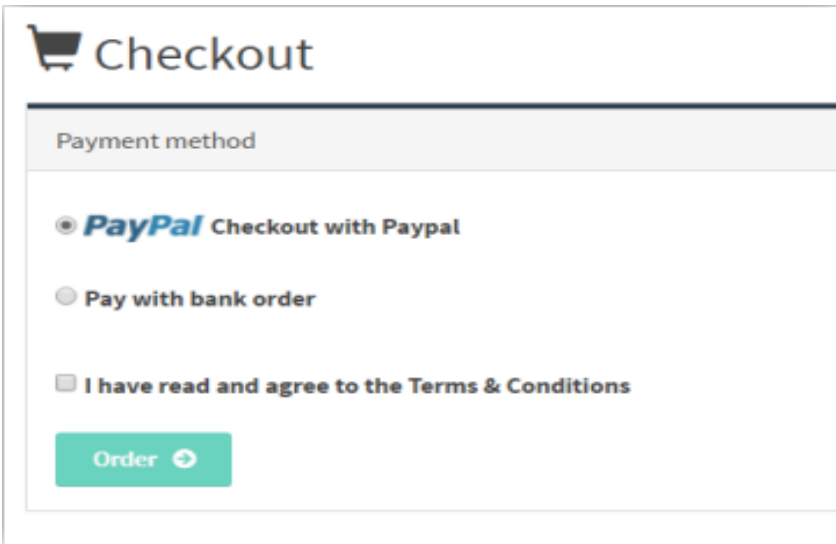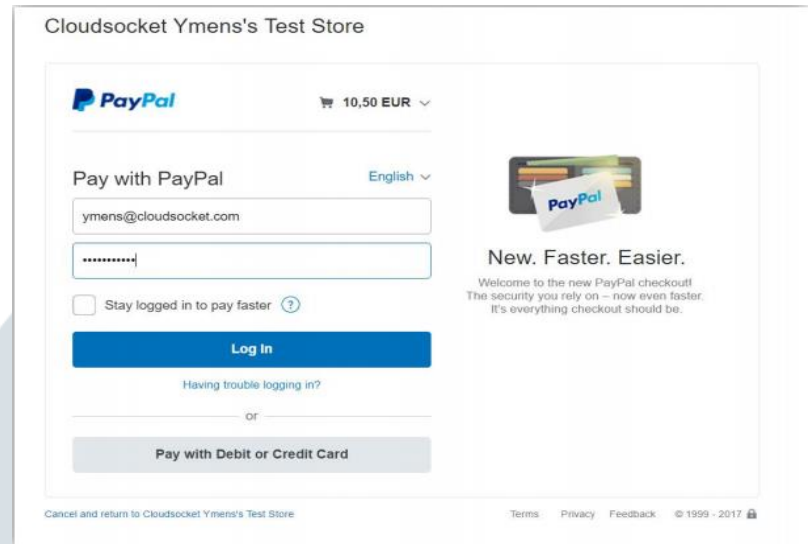
PAYMENT MODULE

The Payment module supports:
1. Paypal – redirects to Paypal website where the user is prompted for credentials
2. Bank order – sends an email to the client with the invoice attached

Present the concept behind Identity Provider.

IDENTITY PROVIDER

CloudSocket

Identity Provisioning & Lifecycle Management

☑ Provisioning is the creation or updating of identities.

    ☐ The purpose is to allow newly created identities to start using services or resources provided by the application and to ensure identity information is consistent across a range of distributed applications

    ☐ Provisioning mostly concerns creating user accounts initially when the user first needs access to various applications.

    ☐ Apart from that, it also deals with reconcilliating existing user accounts from different sources and keeping user accounts up-to-date.

☑ Provisioning deals with the synchronization of identity information across different applications

☑ Federated Provisioning: Provisioning implemented within the context of a cross-organizational identity federation

CloudSocket

Access Management: Authentication & Authorization

☑ Authentication:
- ☐ Cross Domain Single Sign On
- ☐ Web SSO
- ☐ Social Login
- ☐ Federated SSO

☑ Authorization:
- ☐ Service Level (External Cloud Provider): Authorization of client (apps, systems) to access services
- ☐ User Level: Decoupled and specific for each module and/or external cloud service; typically role based access control (RBAC)

CloudSocket

Ymens IAM: Identity Broker

Social

Enterprise

OpenID

OpenID
Connect

SCIM

SAML2

SOAP

HTTP

OpenID
Connect

SCIM

OAuth2

Cloud Apps
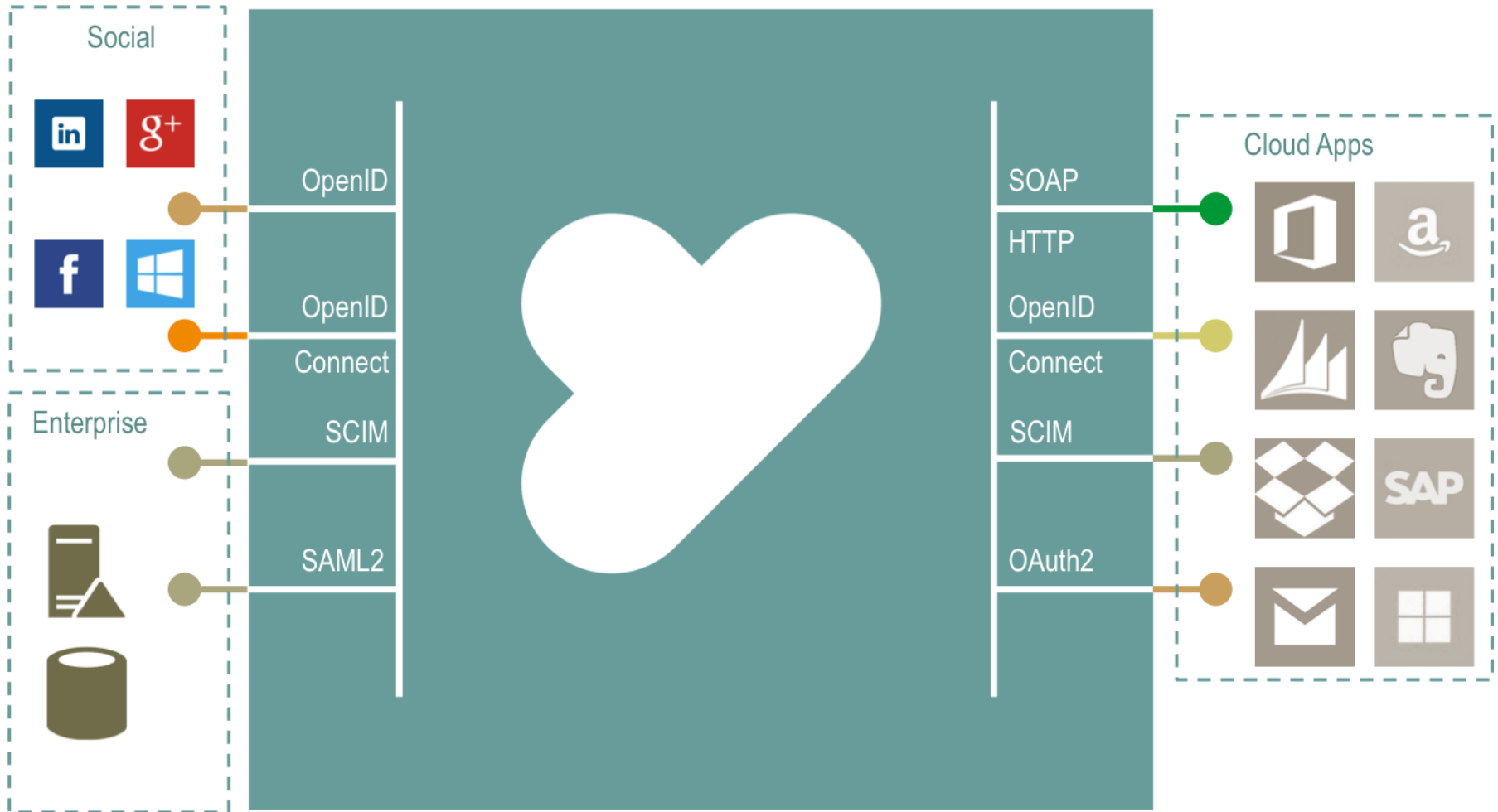
CloudSocket

Ymens IAM: Cross Domain SSO
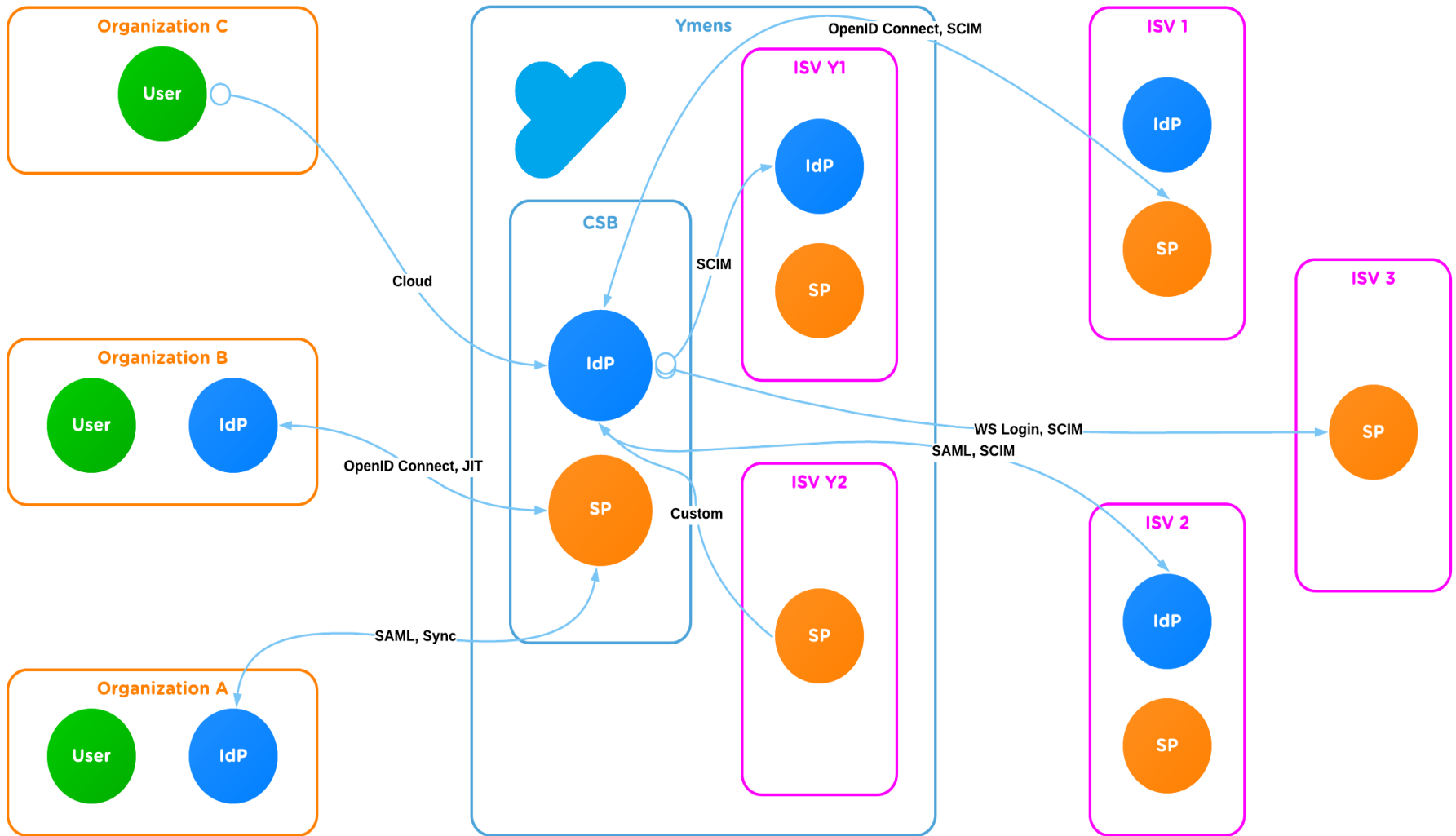
CloudSocket

RELEVANT JARGON

SAML 2.0	OAuth 2.0	OpenID Connect 1.0
▪ Identity Provider ▪ Service Provider ▪ Attributes ▪ SP Metadata	▪ Auth Server ▪ Resource Server	▪ OpenID Provider ▪ Relying Party ▪ User Claims ▪ Client Claims

- **Service Provider:** A web application that provides identity information via the SCIM protocol

- **Consumer:** An application that uses the SCIM protocol to manage identity data maintained by the Service Provider

- **Resource:** The Service Provider managed artifact containing one or more attributes; e.g., User or Group

SCIM

CloudSocket

SCIM

- SCIM was initially created with cloud use cases in mind

- It turns out that a common language to move identities on-premises is really useful

- This is some of the first "real world" adoption of SCIM

- SaaS providers have started implementing SCIM for their identity APIs

  – Salesforce.com, Cisco Webex, etc…

- Clients call these APIs from an on-premises identity management system to manage identities

CloudSocket

Use Cases: Trusted client applications

☑ Trusted clients include:

    ☐ Internal applications (running at the server side or client side)

    ☐ Mobile clients

☑ Mapping to OAuth 2.0

    ☐ Client credentials for access token (super user)

    ☐ Resource owner password credentials for access token (run as the "resource owner")

CloudSocket

Use Cases: Third party applications

☑ Roll out web APIs to 3rd party applications

☑ OAuth 2.0 will be used as the Authorization mechanism

☑ Mapping to OAuth 2.0

 ☐ Authorization code flow

 ☐ Implicit grant flow

CloudSocket

CONCLUSION & QUESTIONS

CloudSocket

Conclusions

▸ These BPaaS bundles are ready to be purchased and run even by a non-technical customer

▸ Many types of BPaaS bundles offered in the Marketplace are tailored to customer needs starting from a core functionality.

▸ A BPaaS bundle once purchased can be run as many times as the customer wants

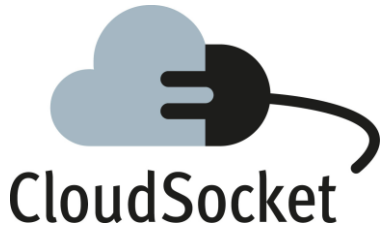▸ Identity Provider module can be used in any project that needs SSO functionality

CloudSocket

QUESTIONS

CloudSocket

Stay in Touch

www.cloudsocket.eu

@CloudSocketProject

https://www.youtube.com/channel/UC8qbCYS49FfG7S8j5AABpaA

CloudSocket