

Simpl-Open Development Roadmap

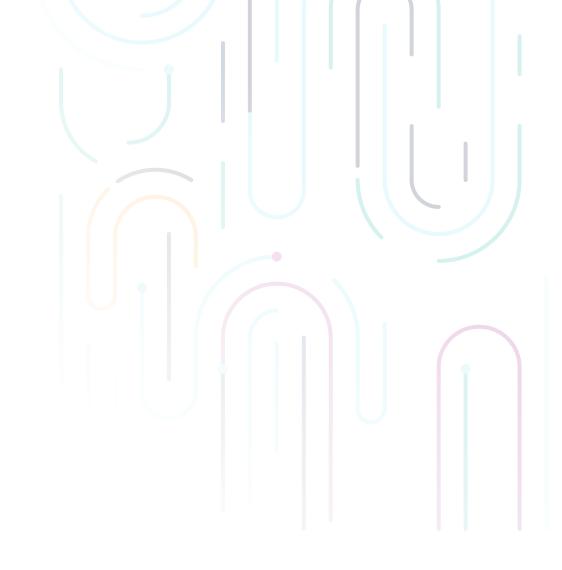
May 2025 Update

Content

This document provides further insight into the Simpl-Open development roadmap by detailing the Simpl-Open MVP scope and the upcoming Simpl-Open release.

It is structured as follows:

- 1. Simpl-Open development Roadmap May 2025 update.
- 2. Simpl-Open MVP Scope January 2025.
- 3. Zoom into Simpl-Open June 2025 release.





Simpl-Open roadmap 2025-26 Q3 25 Q1 26 Q1 25 Q2 26 Q2 25 Q4 25 Q3 26 Q4 26 ID/Trust extension Gov. Authority ID/Trust consent mgmt. extension Ticketing and helpdesk Set-up Data Space Governance Authority Tier 1 Federation Configuration (incl. EU-login and eIDAS) Support function Schema management Tier 2 Federation Configuration **CSIRT** Define Policies in schema Set-up of the Apps Catalogue Auditing Piveau Catalogue Onboarding extensions Consent extensions to onboarding Self Sovereign Identity SSI **Onboarding DS Participant** Offboarding process Individual users onboarding Proxy solution for Tier 2 communication **Contract Template** Consent management Publish Resource Integration of infrastructure dep... Publishing Apps to the Catal... Resource description management Federated cross-Dataspaces catalogue search Search Resource Search Apps Contract Management extension **Contract Management negotiation extensions** Contract **SLA and Licenses** Contract enforcement Billing and invoicing **Provisioning Templates** PaaS Services Integration Consume Infrastructure Resource Cloud and Edge computing Infra decommissioning **HPC** Network FW security and VPN services Consumption across - data spaces Consume Data/Application Resource Data sharing eDelivery cases for connector App sharing: Calc algorithms App sharing: SW apps Data sharing - Bulk data transfer App sharing: Machine Learning Data address mana... Data streaming Data orchestration Anonymisation Data quality rules Distribution execution Data Processing: analytics, visualisation Data Gov.: lineage, profiling **Pseudonymisation** Monitoring business event capture ext. Standard reports Audit Energy efficiency & sustainability Management/Operations of Data Space Healthchecks monitoring ext. Monitoring of Simpl-Open agents and their comp... QoS and Alerts Provisioned infrastructure monitoring Provisioned applications performance monitoring Credentials renew/revoke Download auto-renewal certificates Gov. Automated set-up support Participants Audit IT Administration European 3 | Simpl-Open Commission

Contract & Billing

Infrastructure

Catalogue & Connector

Admin & Monitoring

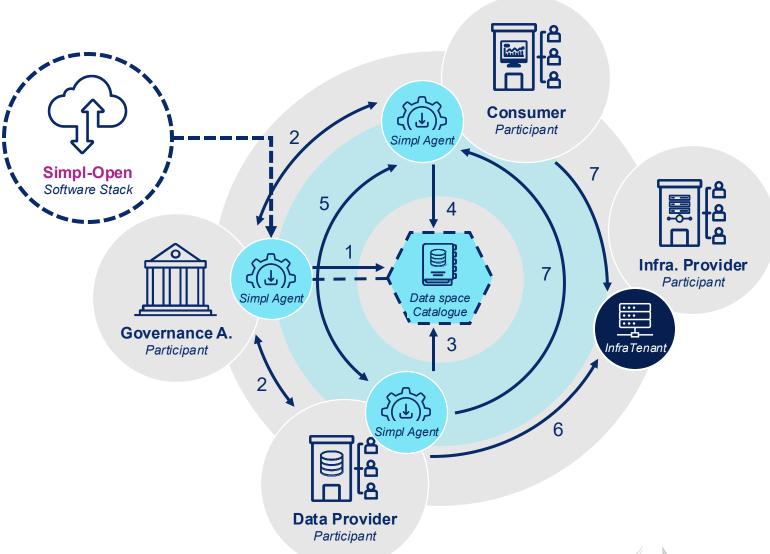


Simpl-Open MVP Scope

Released 30 Jan 2025 (Annual Event)

What you can do with the MVP

- 1. Configure the catalogue with customizable schema and vocabulary.
- 2. Onboard participants in the data space.
- 3. Publish service offerings (data, infra or bundles) to the catalogue.
- 4. Discover service offerings with their details from the catalogue.
- 5. Establish a contract to consume the service.
- 6. Provision the resources (data, infra or bundles).
- Receive the access information and consume the resources.







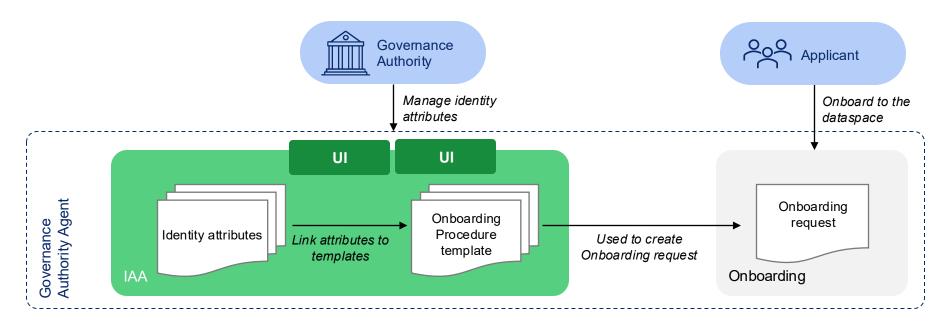
ID/Trust extension

Roadmap items definition

As a data space Governance Authority, **I want to** configure identity attributes on onboarding procedure template, **so that** I can customise the access control for onboarded participants.

What: The ID/Trust extension will provide a UI and APIs for the governance authority to:

- Link identity attributes to an onboarding procedure template. Identity attributes associated with the onboarding procedure template will be suggested to onboarding reviewers before the approval of the onboarding request.
- Select the identity attributes to assign to the approved applicant participant.



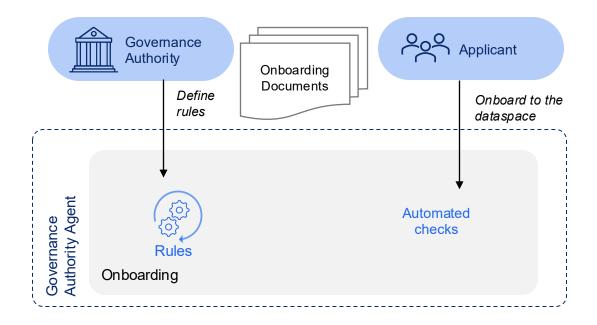


Onboarding extension

Roadmap items definition

As a data space Governance Authority, **I want to** automatically validate or reject onboarding documents, **so that** participants can be onboarded in the data space with limited or no manual intervention.

What: The onboarding extension provides more elaborated procedures for onboarding, including automated document validation/rejection. The governance authority will have the possibility to define their own custom rules (checking the presence and the content of documents). It also includes an improvement of the UI/UX.



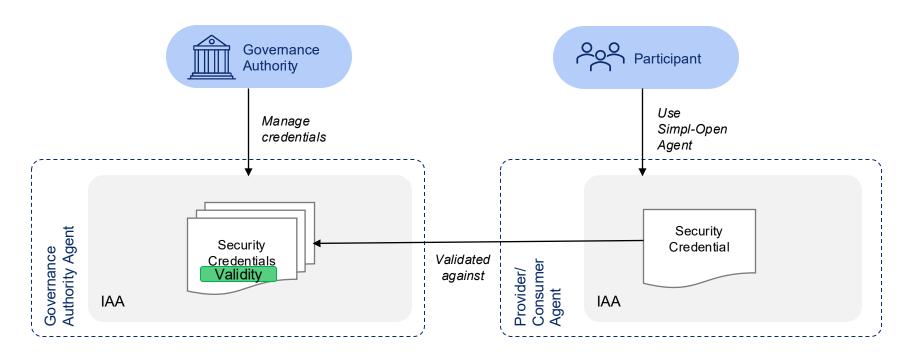


Credentials renew/revoke

Roadmap items definition

As a data space Governance Authority, **I want to** renew, revoke, suspend and reactivate participant's credentials, **so that** I can enforce security governance rules.

What: This functionality allows the governance authority to renew and revoke participant's credentials to access the data space. It allows to enforce security rules, control access, and manage credential validity according to the data space governance requirements.



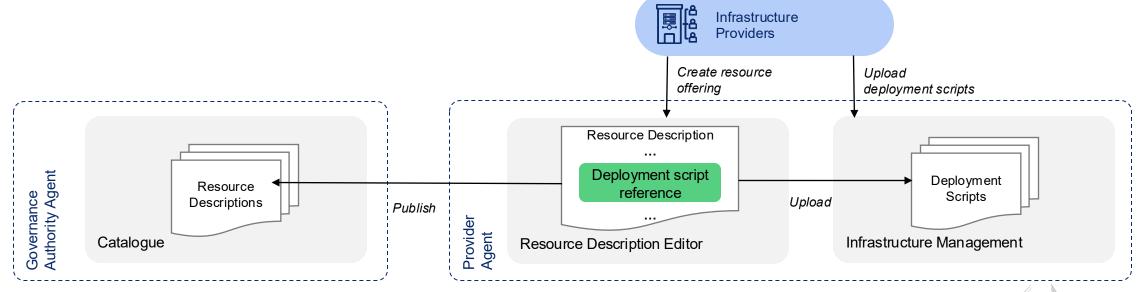


Integration of infrastructure deployment scripts mgmt. with resource description publication

Roadmap items definition

As an infrastructure provider, I want to upload an infrastructure deployment script in the resource description editor, so that I can add it as a reference to the resource description for an infrastructure offering.

What: This functionality enables infrastructure providers to upload their infrastructure deployment scripts (previously uploaded in the Simpl-Open agent through the deployment script management functionality) in a user-friendly way directly from the UI of the resource offering editor and to have it directly added to the resource description. The resource description can then be published to the catalogue together with a link to the deployment script, that will be used for infrastructure provisioning, once a consumer is requesting the resource.



Data Address Management

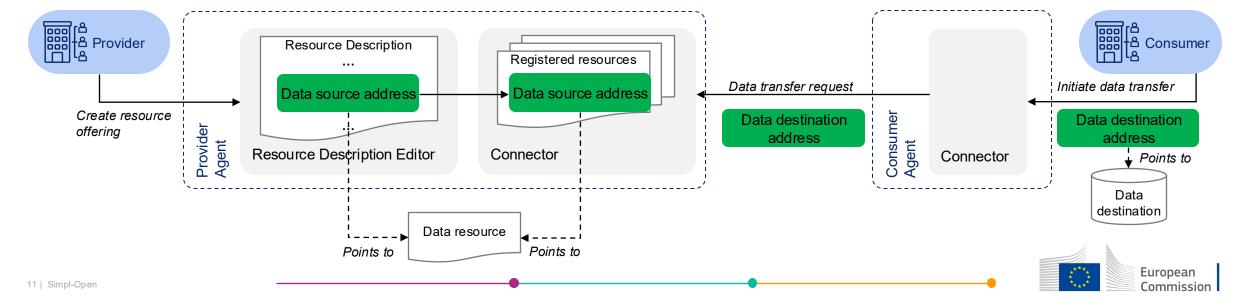
Roadmap items definition

As a provider, **I want to** include a data source address, based on a predefined template per the data sharing method, in the resource description, **so that** I can support automated data sharing.

As a consumer, **I want to** specify a data destination address, based on a predefined template per the data sharing method, when initiating a data transfer, **so that** I can get the resource at the destination of my choice.

What: The Data Address Management functionality allows the providers and consumers to describe a data address in a structured manner to meet the technical requirements of the Data Transfer Process, based on the Data Sharing Method (e.g. S3 transfer or application credentials transfer). This is achieved by providing for each Data Sharing Method a predefined structure (data address template), to be used for defining the data source address and data destination address. It contains parameters such as the type of transfer, access information, object name and region. The Data Address Template ensures that input is standardized, allowing an automated data sharing within Simpl-Open.

The data address will only be stored in the connector and not in the federated catalogue of the data space.

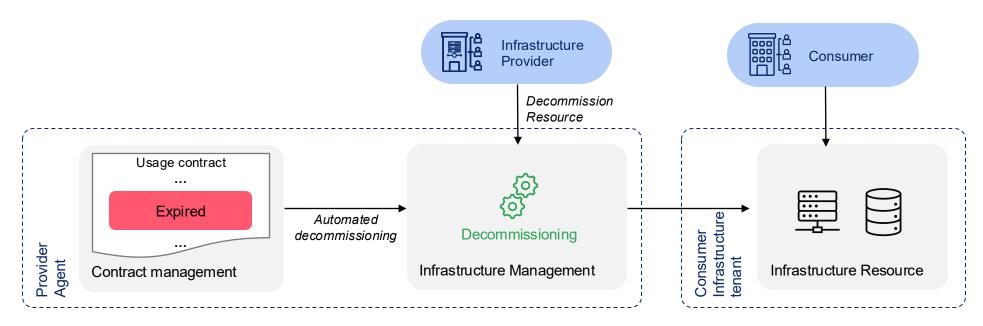


Infrastructure decommissioning

Roadmap items definition

As an infrastructure provider, **I want to** decommission a provisioned infrastructure resource, **so that** I can ensure access to my resources is aligned with, for example, the contract terms.

What: The infrastructure decommissioning functionality enables infrastructure providers to decommission infrastructure resource previously provisioned for a consumer. The decommissioning can also be automated, for example when the usage contract for a said resource expires or is revoked.



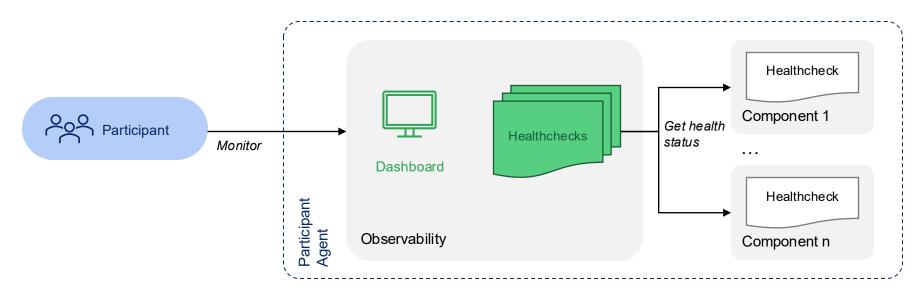


Healthchecks monitoring extension

Roadmap items definition

As a system administrator, **I want to** visualise the health of all my Simpl-Open agent services in real-time, **so that** I can monitor the status of my agent and react in case of disruption.

What: This functionality introduces a dashboard that presents the real-time health and availability status of all agent services running within the Simpl-Open agent. It aims to give operators and administrators a high-level overview of system health using clear visual indicators, helping them to identify outages or degradations at a glance. This overview dashboard will be the go-to entry point for day-to-day operational monitoring, and it will be complemented with more detailed/advanced dashboards that offer more granular insights needed to diagnose problems in specific services and analyzes historical health check data to detect patterns that deviate from normal system behavior. This enables more proactive troubleshooting, capacity planning, and risk mitigation within Simpl-Open.





Standardise API to guidelines

Roadmap items definition

[Non-Functional Requirements - Interoperability]

Why: In the context of Simpl-Open, APIs serve as the foundation for seamless integration between various modules, internal systems, and third-party applications. Their primary purpose is to provide a structured, secure, and efficient way for systems to exchange information and perform operations without rigid coupling.

A well-designed API unlocks new use cases, accelerates product development, and ensures that systems remain adaptable to future technological advancements. By offering a clear and well-defined interface, APIs eliminate unnecessary complexities, making interactions between services straightforward and intuitive for consumers.

APIs also foster modularity, allowing different teams to work independently on separate services without compromising the overall system's stability. Their implementation facilitates automation, analytics, and performance optimisation across the platform. By establishing a central communication point, APIs help prioritise functionalities, define a clear roadmap, and ensure that development efforts are in line with business and user needs.

What: All the APIs developed in the context of Simpl-Open MVP will be adapted to follow the established API guidelines of Simpl-Open.





Thank you



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