



EUROPEAN COMMISSION

Directorate-General for Communications Networks, Content and Technology

CNECT.E – Future Networks

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Horizon Europe (HORIZON)

D2.1 Software Release Beta Environment – Epics and User Stories

COVER PAGE

PROJECT	
<i>Grant Preparation (General Information screen) — Enter the info.</i>	
Project number:	101136078
Project name:	Fediversity
Project acronym:	Fediversity
Call:	HORIZON-CL4-2023-HUMAN-01-CNECT
Topic:	HORIZON-CL4-2023-HUMAN-01-12
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Service:	CNECT/E/03
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Project duration:	36 months



Epic 1: Implement the collaboration between the Nixos VM and the Identity Management architectural components.

1. User Story 1.1:

- **Story:** As an admin, I want to create an admin account for the services so that my configurations can retrieve information from the hosting provider's databases.
- **Test:**
 - Given I am an admin
 - When I create an admin account for the services
 - Then the configurations should retrieve information from the hosting provider's databases

2. User Story 1.2:

- **Story:** As a developer, I want to integrate the Identity Management component with Nixos VM so that user authentication is streamlined.
- **Test:**
 - Given I am a developer
 - When I integrate the Identity Management component with Nixos VM
 - Then user authentication should be streamlined

Epic 2: Implement the collaboration between the Orchestrator and the Nixos VM architectural components.

1. User Story 2.1:

- **Story:** As a DevOps engineer, I want the deployment software to deploy NixOS configurations onto existing VMs so that the deployment process is automated.
- **Test:**
 - Given I am a DevOps engineer
 - When the deployment software deploys NixOS configurations onto existing VMs
 - Then the deployment process should be automated

2. User Story 2.2:

- **Story:** As a system administrator, I want to inform NixOps4 about the configurations it should write for the provided VMs so that the VMs are configured correctly.
- **Test:**
 - Given I am a system administrator
 - When I inform NixOps4 about the configurations for the provided VMs
 - Then the VMs should be configured correctly

3. User Story 2.3:

- **Story:** As a developer, I want to improve the multi-machine handling of Fediverse services so that the system can handle multiple machines efficiently.
- **Test:**
 - Given I am a developer
 - When I improve the multi-machine handling of Fediverse services
 - Then the system should handle multiple machines efficiently

Epic 3: Implement the collaboration between the Orchestrator architectural component and the Virtualization architectural group of components.

1. User Story 3.1:



- **Story:** As a system administrator, I want to provision VMs based on a configuration so that the VMs are set up according to the project requirements.
- **Test:**
 - Given I am a system administrator
 - When I provision VMs based on a configuration
 - Then the VMs should be set up according to the project requirements

2. User Story 3.2:

- **Story:** As a project coordinator, I want to use pre-deployed VMs for the demo in April 2025 so that the demo can proceed without delays.
- **Test:**
 - Given I am a project coordinator
 - When I use pre-deployed VMs for the demo in April 2025
 - Then the demo should proceed without delays

Epic 4: Implement the collaboration between the Nixos VM and the Storage architectural components.

1. User Story 4.1:

- **Story:** As a hardware manager, I want to provide shared storage for the VMs so that the VMs can access the necessary storage resources.
- **Test:**
 - Given I am a hardware manager
 - When I provide shared storage for the VMs
 - Then the VMs should access the necessary storage resources

2. User Story 4.2:

- **Story:** As a developer, I want to ensure that the storage provided by Procolix (Linstor storage) is integrated with Nixos VM so that the storage system is functional.
- **Test:**
 - Given I am a developer
 - When I ensure the storage provided by Procolix (Linstor storage) is integrated with Nixos VM
 - Then the storage system should be functional

Epic 5: Implement the collaboration between the Virtualization and the S3 storage architectural components.

1. User Story 5.1:

- **Story:** As a developer, I want to separate the service machines from the S3 machines so that the system can handle large objects like pictures and videos more efficiently.
- **Test:**
 - Given I am a developer
 - When I separate the service machines from the S3 machines
 - Then the system should handle large objects like pictures and videos more efficiently

2. User Story 5.2:

- **Story:** As a system administrator, I want to ensure that the S3 storage is reliable and accessible so that the services can store and retrieve large objects without issues.
- **Test:**



- Given I am a system administrator
- When I ensure the S3 storage is reliable and accessible
- Then the services should store and retrieve large objects without issues

Epic 6: Implement the collaboration between the Orchestrator and the S3 storage architectural components.

1. User Story 6.1:

- **Story:** As a developer, I want the orchestrator to inform the external S3 storage of new bucket creation so that new storage buckets are created automatically.
- **Test:**
 - Given I am a developer
 - When the orchestrator informs the external S3 storage of new bucket creation
 - Then new storage buckets should be created automatically

2. User Story 6.2:

- **Story:** As a DevOps engineer, I want to deploy resilient S3 storage from the orchestrator so that the storage system is robust and reliable.
- **Test:**
 - Given I am a DevOps engineer
 - When I deploy resilient S3 storage from the orchestrator
 - Then the storage system should be robust and reliable

3. User Story 6.3:

- **Story:** As a project coordinator, I want to deploy Garage as part of our experiments so that we can test the S3 storage system's functionality.
- **Test:**
 - Given I am a project coordinator
 - When I deploy Garage as part of our experiments
 - Then we should test the S3 storage system's functionality