

# Cluster Manager – User Documentation (Sprint 06)

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## 1. Project Overview and Cluster Manager Role

The **Backup Cluster Manager** project (AMOS) aims to develop a distributed backup management system consisting of a grid of service **nodes**. The primary motivation is to **scale up** backup processes to larger data volumes by increasing parallelism across this node grid.

Nodes in the grid can assume one of three roles: 1. **Cluster Manager** (The focus of this project) 2. **Backup Manager** (Simulated functionality) 3. **Backup Storage** (Simulated functionality)

The **Cluster Manager** acts as the **supervisor instance** and manages the entire grid of service nodes.

### Key Cluster Manager Responsibilities:

- Managing the **addition or removal** of service nodes.
- Adding and removing **SEP sesam server nodes** to and from the cluster.
- Knowing which node plays which **roles**.
- Knowing which node is responsible for which **data**.
- Controlling the cluster mode at the SEP sesam server nodes.
- **Synchronizing** users, groups, ACLs, and potentially other information.
- **Synchronizing** the server and HTTPS certificates and keys.
- **Proxying** the communication between clients and the SEP sesam server nodes.

The Cluster Manager's frontend has a simple interface to **visualize the current state** and the configured users and groups derived from all configured (enabled) SEP sesam Server Nodes.

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## 2. Managing SEP sesam Server Nodes

The Cluster Manager manages all known **SEP sesam Server Nodes** and stores this information in a database table.

Feature	Description
<b>View All Nodes</b>	The frontend allows visualizing the current state of the SEP sesam Server Nodes.

Feature	Description
<b>Search and Filter</b>	The Cluster Manager's frontend allows filtering and searching for nodes.

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### 3. Managing Users and Groups

The Cluster Manager manages and **synchronizes** user and group configurations across the enabled nodes.

Feature	Description
<b>View Users</b>	Users can be viewed as a list in the frontend.
<b>Create New Users/Groups</b>	New users can be created through the frontend. A name and a password as well as a predefined group are required for the creation.
<b>Disable/Remove Users/Groups</b>	Users can be disabled or removed. The UI lets you select a user you want to change for this purpose.
<b>Search and Filter</b>	Users can be searched by their name and ID or filtered by their current state ' <b>enabled</b> '/' <b>disabled</b> '.

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### 4. Managing Backups

Users can create backups by calling a specific endpoint. In the frontend, the configured backups can be viewed and managed.

Feature	Description
<b>View Backups</b>	Backups can be viewed in the frontend.
<b>Search and Filter</b>	Backups can be searched and filtered for their current status.
<b>Add/remove Backups</b>	Backups can be added and removed via the UI interface.