

User story

As an administrator I want to create and license users in more seamless way so that I can save time.

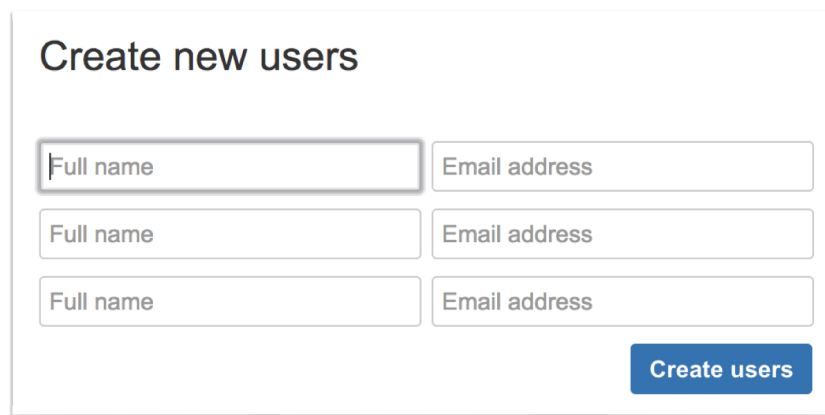
Acceptance criteria

- Administrator can create up to 3 users at once.
- Administrator can grant application access to created users.

Domain details

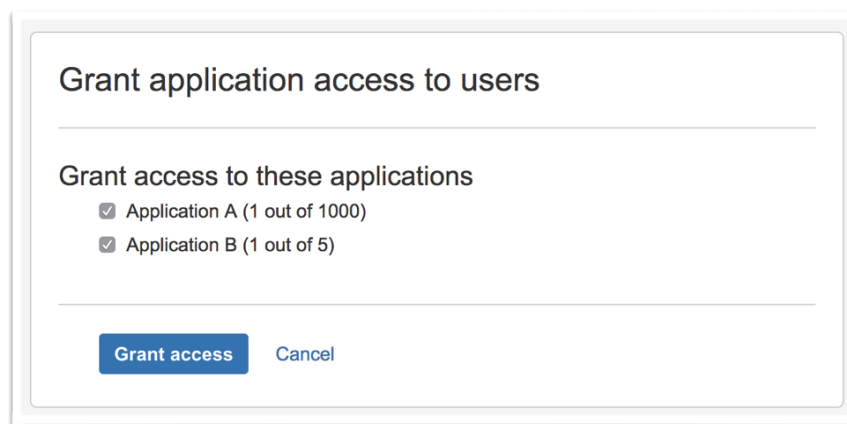
- Multiple applications can be available in the system.
- Applications can be available in various tiers of licenses.

User interface mockups



The mockup shows a form titled "Create new users". It contains three rows of input fields. Each row has a "Full name" field on the left and an "Email address" field on the right. A blue "Create users" button is located at the bottom right of the form.

Create multiple users at once.



The mockup shows a form titled "Grant application access to users". It has a section titled "Grant access to these applications" with two checked checkboxes: "Application A (1 out of 1000)" and "Application B (1 out of 5)". At the bottom, there are two buttons: "Grant access" (blue) and "Cancel" (grey).

Grant application access to created users.

Technical background. System architecture.

Web Application

Web application is implemented as Single Page App. The app supports mobile and web browsers. It communicates with underlying backend services via their REST API. Mostly talks to User Management Service and Application Management Service.

Auth Service

All requests to backend services go through Auth Service, which is responsible for confirming request sender has account in the system, is currently logged in, and all required permissions for a given operations had been granted to the user.

Auth Service talks to User Management Service and Application Management Service. In order to reduce chattiness between the service and dependant services, time bound authentication and authorisation tokens are generated and stored in the service dedicated database.

Message Queue

Communication between internal services is handled by Message Queue. Every request from one service to another is represented as a message with payload, sender and receiver details.

Messages exchanged between services via message queue are persisted in document database. Queue is highly resilient, it waits for a service to come back online if it's unavailable and can't receive message at given time.

Application Management Service

Application Management Service allows one to create, read, update, manage application licenses, and grant access and other application permissions to users fetched from User Management Service. Application related data is persisted in the service dedicated database.

User Management Service

User Management Service is responsible for generating usernames, and creating, reading, updating users in the system. The service also indirectly through a 3rd party email delivery service sends emails to users.

In order to validate account and set password User needs to follow a link received in email.

Business background. Business domain.

Users

System Administrators and Application Administrators can create and manage Users. Usernames must be unique.

Users can set and change their passwords by clicking on a link provided in an email. Users can be toggled active/inactive, but can't be deleted.

Administrators

User becomes Application Administrator once granted Administrative Privileges to manage an Application. System Administrators grant Administrative Privileges for the System and its Applications.

First User registered in System is automatically granted System Administrator privileges and role.

Applications

Applications are created in the System by System Administrators. Application, once created, can later be registered and enabled provided active Application License. Licenses are in various Tiers. Tier is defined by the maximum number of users it can seat, its capacity.

Users can be granted access to an active Application. Application License can be updated at any given time by System Administrators and the Application Administrators. Only higher Tier licenses are accepted on update. Licenses expire.

Applications can't be deleted, but they can be disabled/enabled. Disabling an Application results in invalidating its licenses and thus stripping Application Administrators and Application Users out of privileges.