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# Chart Structure

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The chart contains the following services:

## predicate

The main backend service. Inside the container, a FastAPI server is deployed.

The service also includes two init-containers:

- `init-db` - applies Alembic migrations to the database;
- `metric-init` - initializes standard Predicate metrics. If the metric already exists, it will not be created, and a corresponding message will be logged.

## predicate-manager

A Celery service responsible for executing system tasks (creating a project run, creating necessary nodes, saving results to the database, uploading files to S3, etc.).

## predicate-worker

A Celery service responsible for executing computational tasks (nodes) of projects (data extraction, applying transformations to data, applying metrics to data).

## predicate-celery-monitor

An auxiliary service responsible for monitoring Celery tasks and saving their state to the database.

## predicate-flower

A Celery Flower service responsible for visualizing Celery tasks.

## predicate-postgresql

A service responsible for storing the Predicate database.

`predicate-rabbitmq`

A service responsible for storing the task queue for Celery.