

OptaWeb Employee Rostering User Guide

The OptaPlanner Team

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Table of Contents

1. OptaWeb Employee Rostering Introduction	1
1.1. What is OptaWeb Employee Rostering?	1
1.2. System Properties	1
2. Architecture	2

Chapter 1. OptaWeb Employee Rostering

Introduction

1.1. What is OptaWeb Employee Rostering?

Every organization faces planning problems: providing products or services with a limited set of *constrained* resources (employees, assets, time and money). One such planning problem is employee shift rostering: assigning shifts to employees. OptaWeb is a web application and REST service that solves employee shift rostering problems using the [OptaPlanner engine](#).

1.2. System Properties

These system properties can overwrite default properties of the application, for example, by passing `-Doptaweb.generator.zoneId="America/New_York"` to Spring Boot. These system properties might also be exposed as OpenShift template parameters.

- **optaweb.generator.timeZoneId:** The time zone ID for the automatically generated tenants. For example `America/New_York`. This defaults to the system default Zone ID.
- **optaweb.generator.initial.data:** What data to initially put in the database. Supported values are: `EMPTY` (no data) and `DEMO_DATA` (several tenants of various sizes). This defaults to `DEMO_DATA`

The OpenShift docker image also supports these parameters:

- **org.optaweb.employee rostering.persistence.datasource**
- **org.optaweb.employee rostering.persistence.dialect**
- **org.optaweb.employee rostering.persistence.hbm2ddl.auto**
- **org.optaweb.employee rostering.persistence.id.generator**

Chapter 2. Architecture

OptaWeb Employee Rostering Architecture

Use the powerful REST interface or the user friendly web interface.



OptaWeb Employee Rostering class diagram



Solving with OptaPlanner

OptaPlanner automatically assigns the shifts, according to our constraints.

