

Schedule Similarity

Work-flow to Use Schedule Similarity

- » Use **Load Template** to set up and modify the preference for a variety of conditions
- » Repeat **Load Template** for additional instances of any template

Preference Overview

This preference enables you to create a new schedule based on a supplied schedule with an increasing penalty for deviation from the original. For example a low penalty of say 1, says "I really don't care very much about deviations from the supplied schedule". The optimized schedule may be quite different from the original. A high penalty of say, 50 says "I am very concerned about deviations from the supplied schedule". The optimized schedule may not look very different from the original.

Using this preference, you can control the level of disruption to staff during a schedule change and indeed use it in stages to move from the supplied unoptimized schedule to a fully optimized schedule.

The fourth template below, **Schedule Similarity - by trip id**, is the simplest to understand: Maintain Trip ID similarity. Its only parameter is the penalty. Here are results of setting increasing penalties as expressed by several KPIs:

Table 1-1: Schedule Similarity - KPI Partial Comparison for various penalties




KPI	Customer Schedule	First Optimization	Penalty			
			5	30	50	100
Duties	173	153	153	166	168	171
Vehicles	95	87	87	87	87	90
Vehicle Similarity	N/A	N/A	2%	29%	54%	78%
Total Cost	268,959	246,189	246,532	254,551	257,375	261,614



These results are for a specific schedule and are indicative only.

Templates Available from Optibus

Table 1-2: Templates Summary

Template Name	Purpose	Reference
Schedule Similarity - by route group & trip id	Create a new schedule similar to the supplied schedule for the nominated route group. 	Schedule Similarity - by route group & trip id
Schedule Similarity - by route group & time	Create a new schedule similar to the supplied schedule for the nominated route group while attempting to prevent trip length deviations of more than the specified time. 	Schedule Similarity - by route group & time
Schedule Similarity - by route & time	Create a new schedule similar to the supplied schedule for the nominated route while attempting to prevent trip length deviations of more than the specified time.	Schedule Similarity - by route & time
Schedule Similarity - by trip id	Create a new schedule similar to the supplied schedule for the nominated route. 	Schedule Similarity - by trip id

Schedule Similarity - by route group & trip id

Purpose:

Create a new schedule similar to the supplied schedule for the nominated route group.

Prerequisites: You should have already defined your route groups. See Miscellaneous Assignments, [Route Groups](#).

Opening Dialog:

The screenshot shows a dark-themed dialog box titled "Schedule Similarity - by route group & trip id". At the top right, there are three buttons: "Save as template" (with a floppy disk icon), a pause button (with a double vertical line icon), and a delete button (with a trash can icon). Below the title bar, there is a section labeled "Expert" with a dropdown arrow. Underneath, the "Template Parameters" section contains two fields: "Penalty" with a value of "50" and an information icon, and "Route Group" with a "Select" dropdown menu and an information icon. To the right of these fields is a button labeled "Edit Filters" with a funnel icon.

Points to note:

- » The Route Group field is mandatory
- » Load this template again to for additional route groups

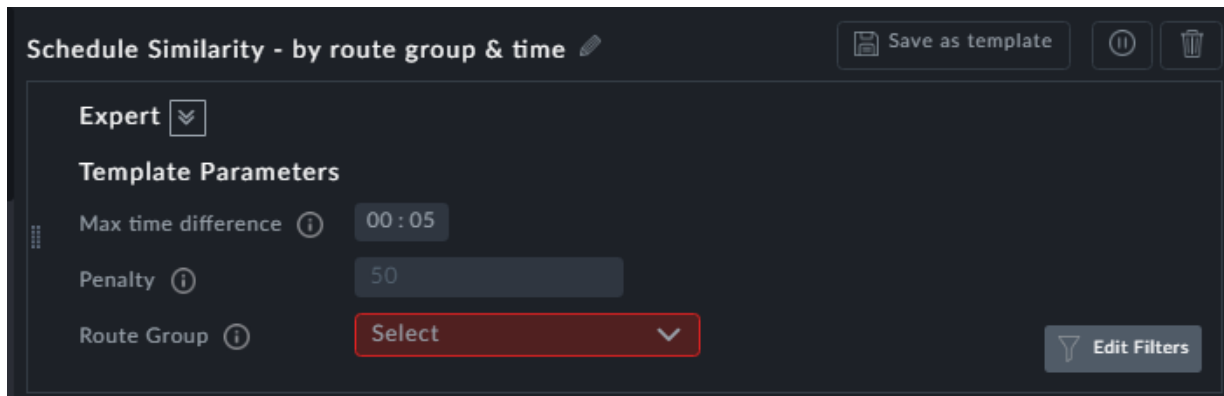
Schedule Similarity - by route group & time

Purpose:

Create a netw schedule similar to the supplied schedule for the nominated route group while attempting to prevent trip length deviations of more than the specified time.

Prerequisites: You should have already defined your route groups. See Miscellaneous Assignments, [Route Groups](#).

Opening Dialog:



The screenshot shows a dark-themed dialog box titled "Schedule Similarity - by route group & time" with a pencil icon. At the top right are three buttons: "Save as template" (with a floppy disk icon), a pause button, and a trash icon. Below the title bar is a section labeled "Expert" with a dropdown arrow. Underneath is the "Template Parameters" section, which contains three rows of controls: "Max time difference" with a value of "00 : 05", "Penalty" with a value of "50", and "Route Group" with a "Select" dropdown menu. Each parameter has an information icon (i) to its right. To the right of the "Route Group" dropdown is an "Edit Filters" button with a funnel icon.

Points to note:

- » The Route Group field is mandatory
- » Load this template again to for additional route groups

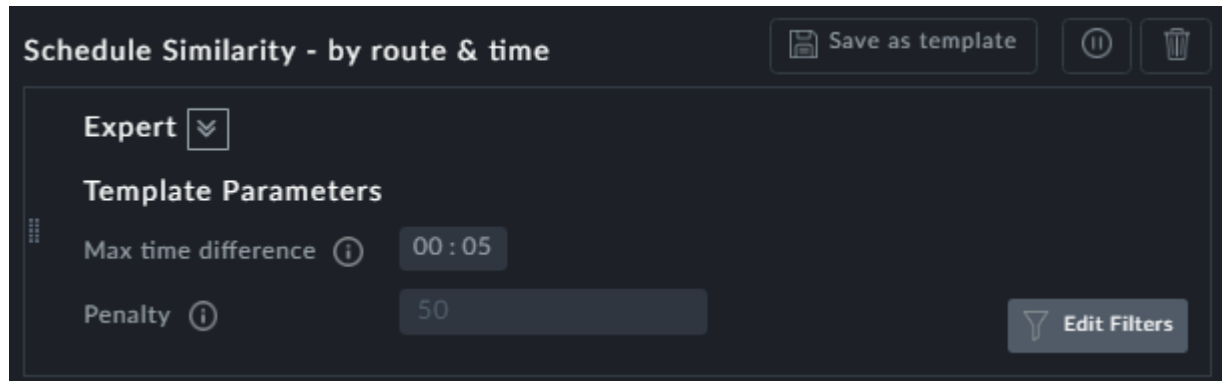
Schedule Similarity - by route & time

Purpose:

Create a netw schedule similar to the supplied schedule for the nominated route while attempting to prevent trip length deviations of more than the specified time.

Prerequisites: None.

Opening Dialog:



The screenshot shows a dark-themed dialog box titled "Schedule Similarity - by route & time". At the top right, there are three buttons: "Save as template" (with a floppy disk icon), a pause button (with a double vertical bar icon), and a delete button (with a trash can icon). Below the title bar, there is a section labeled "Expert" with a dropdown arrow. Underneath, the "Template Parameters" section is visible. It contains two parameters: "Max time difference" with a value of "00 : 05" and an information icon, and "Penalty" with a value of "50" and an information icon. To the right of these parameters is a button labeled "Edit Filters" with a funnel icon.

Points to note:

You can create additional instances of this template using Edit Filters to differentiate between them.

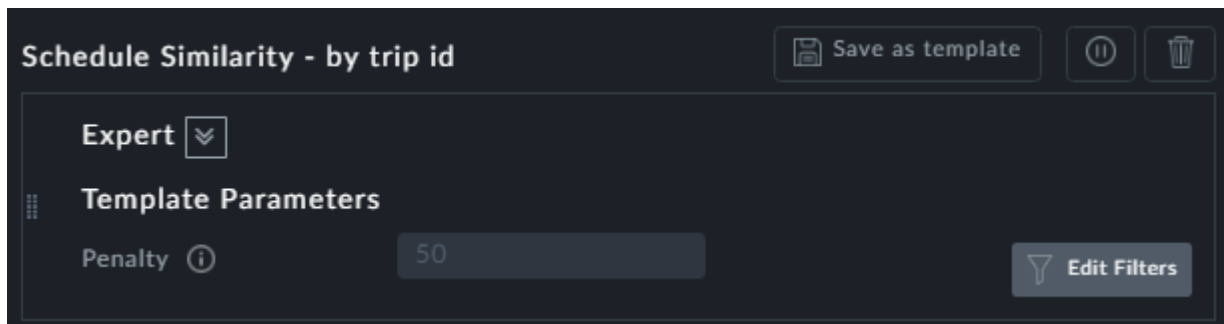
Schedule Similarity - by trip id

Purpose:

Create a netw schedule similar to the supplied schedule for the nominated route id.

Prerequisites: None.

Opening Dialog:



The screenshot shows a dark-themed dialog box titled "Schedule Similarity - by trip id". At the top right, there are three buttons: "Save as template" (with a floppy disk icon), a pause button (with a double vertical bar icon), and a delete button (with a trash can icon). Below the title bar, there is a section labeled "Expert" with a dropdown arrow. Underneath, the "Template Parameters" section is visible, containing a "Penalty" parameter with an information icon (i) and a value of "50" in a text input field. To the right of the input field is an "Edit Filters" button with a funnel icon.

Points to note:

You can create additional instances of this template using Edit Filters to differentiate between them.