Homogenic Vehicle Schedule

Work-flow to Use Homogenic Vehicle Schedule

» Use **Add Preference** to obtain a baseline dialog that sets a Homogenic Vehicle Schedule for a single criterion only

» Repeat **Add Preference** for additional instances of the baseline dialog

» Use **Load Template** modify the preference for a wide variety of conditions

» Repeat **Load Template** for additional instances of any template

Preference Overview

There may be economic advantages in keeping each vehicle on one route, or geographically close routes. The Homogenic baseline preference provides these basic criteria. The Homogenic templates add advanced additional filtering to the basic criteria.

Add Preference Dialog

Purpose:

The baseline dialog provides the simplest form of homogeneity by any one of the criteria, Sign, Route, Region and Route Group.

Prerequisites:

» To apply Regions, they must be defined as user data in your initial Schedule.

» You should have already defined your route groups. See Miscellaneous Assignments, **Route Groups**.
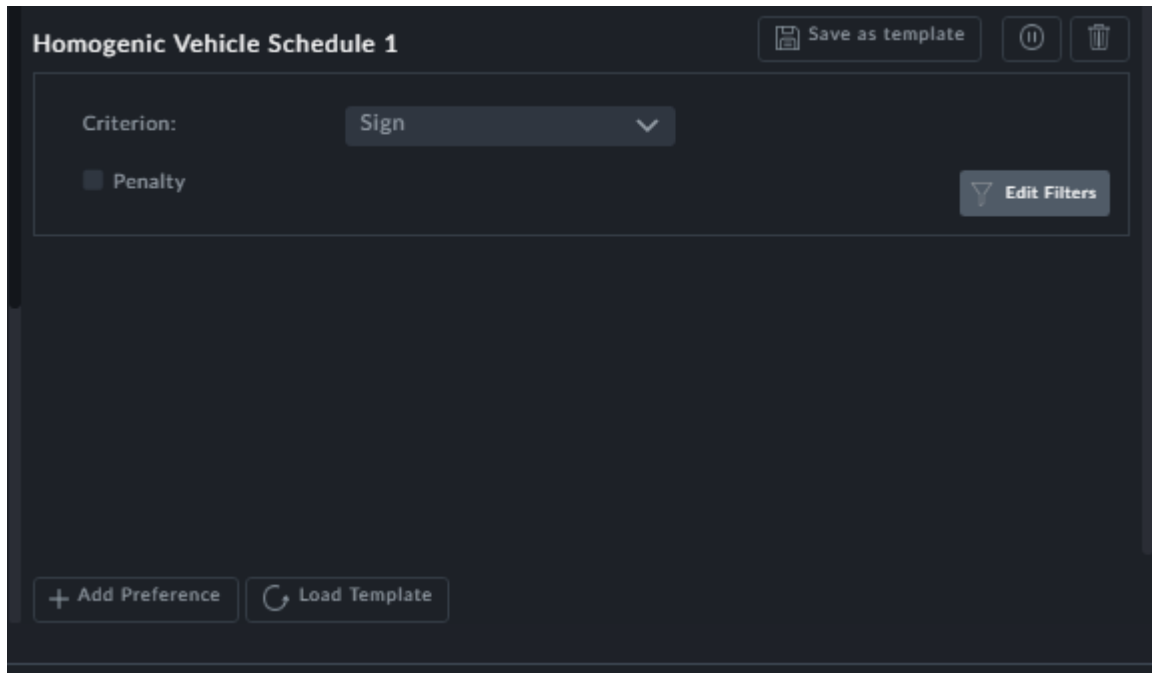
Opening Dialog:
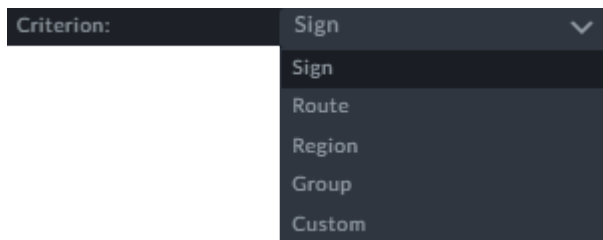
Figure 1-1: Homogenic Vehicle Schedule - Basic dialog
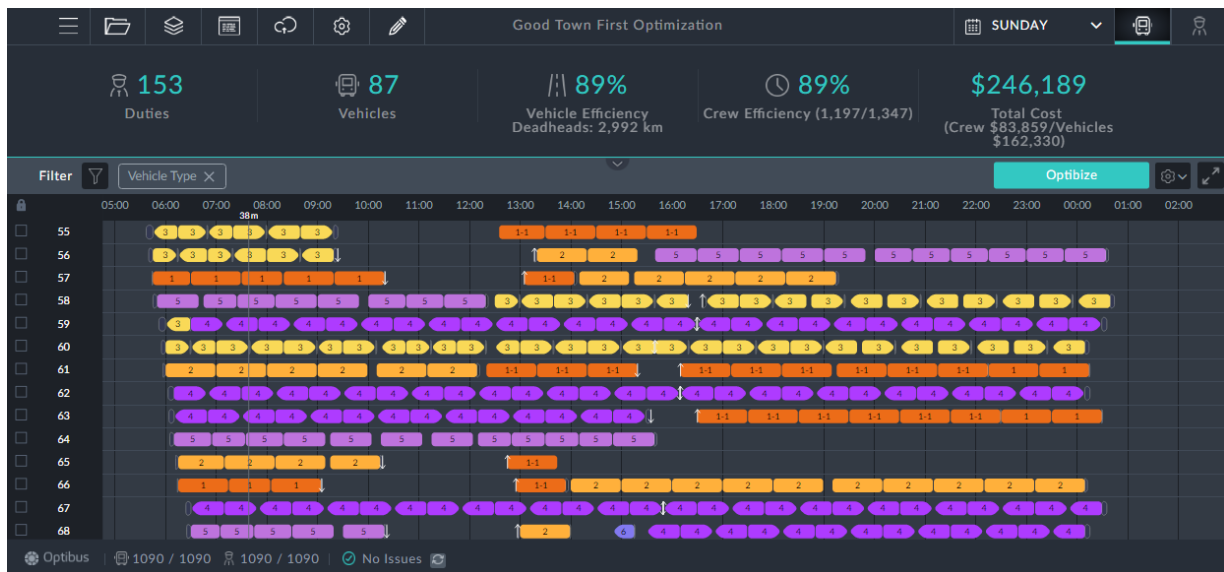

Figure 1-2: Criterion selection

Points to note:

» This preference may be strict or flexible by assigning a penalty

» Using **Edit Filters** you can restrict the Homogenic Vehicle Schedule to a time interval

» Using **Edit Filters** you can restrict it to one or more vehicle types

» Use **Add Preference** to create additional instances with different Homogenic Vehicle Schedules

» The **Custom** item is similar to Expert Mode, primarily intended for use by Optibus Professional Services
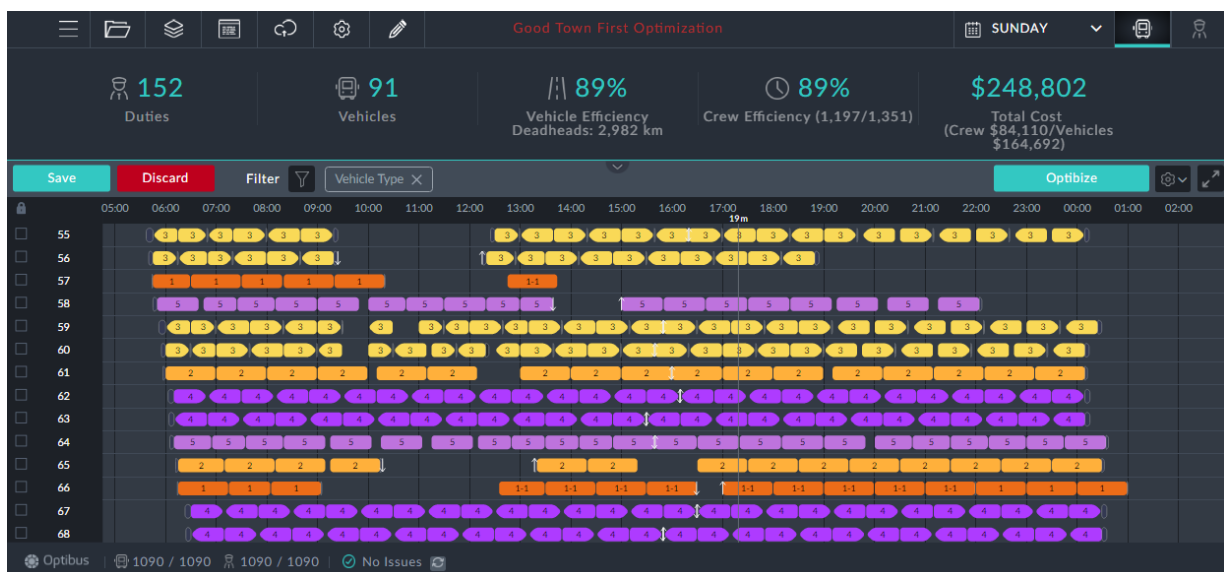
Example 1.

Scenario:

We will create homgeneous routes by Sign for Urban vehicles. Here is a segment of the Vehicle Gantt filtered for Urban vehicles. (The schedule used here has undergone first optimization for Vehicles and Drivers.)

In the preference, choose Sign and then choose Urban vehicles in Edit Filter. Save and optimize.

Outcome:

First, here i is the corresponding segment of the Vehicle Gantt:

The effect on the Gantt is quite dramatic. All of the Urban trips are Signs homogeneous.

In the KPIs, the number of vehicles has risen significantly, by 4 also reflected in the increased Total Cost.

Example 2.

Scenario:

Same as Example 1 but set a penalty of 20.

Outcome:

<some_text>

Templates Available from Optibus

Table 1-1: Templates Summary

Template Name	Purpose	Reference
Override trip minimum trip duration		**Override trip minimum trip duration**
Duration dependent recovery		**Duration dependent recovery**
Duration defendent recovery - By route group		**Duration defendant recovery - By route group**
Prefer inbound\outbound scheduling - By route sign		**Prefer inbound\outbound scheduling - By route sign**
Route group scheduling		**Route group scheduling**
Prefer interline between routes		**Prefer interline between routes**
Single route scheduling		**Single route scheduling**
Prefer geographic round trip		**Prefer geographic round trip**
Adjust deadheads to regulation		**Adjust deadheads to regulation**
Route group scheduling		**Route group scheduling**
Prefer interline between routes		**Prefer interline between routes**
Single route scheduling		**Single route scheduling**

Override trip minimum trip duration

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

» This template restricts the basic case to <some_text>

» The <some_text> field is mandatory. The remaining items are optional.

» This preference may be strict or may be made flexible by assigning a penalty

Duration dependent recovery

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

- » This template restricts the basic case to <some_text>
- » The <some_text> field is mandatory. The remaining items are optional.
- » This preference may be strict or may be made flexible by assigning a penalty

Duration defendant recovery - By route group

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

» This template restricts the basic case to <some_text>

» The <some_text> field is mandatory. The remaining items are optional.

» This preference may be strict or may be made flexible by assigning a penalty

Prefer inbound\outbound scheduling - By route sign

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

» This template restricts the basic case to <some_text>

» The <some_text> field is mandatory. The remaining items are optional.

» This preference may be strict or may be made flexible by assigning a penalty

Route group scheduling

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

» This template restricts the basic case to <some_text>

» The <some_text> field is mandatory. The remaining items are optional.

» This preference may be strict or may be made flexible by assigning a penalty

Prefer interline between routes

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

» This template restricts the basic case to <some_text>

» The <some_text> field is mandatory. The remaining items are optional.

» This preference may be strict or may be made flexible by assigning a penalty

Single route scheduling

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

» This template restricts the basic case to <some_text>

» The <some_text> field is mandatory. The remaining items are optional.

» This preference may be strict or may be made flexible by assigning a penalty

Prefer geographic round trip

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

- » This template restricts the basic case to <some_text>
- » The <some_text> field is mandatory. The remaining items are optional.
- » This preference may be strict or may be made flexible by assigning a penalty

Adjust deadheads to regulation

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

» This template restricts the basic case to <some_text>

» The <some_text> field is mandatory. The remaining items are optional.

» This preference may be strict or may be made flexible by assigning a penalty

Route group scheduling

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

» This template restricts the basic case to <some_text>

» The <some_text> field is mandatory. The remaining items are optional.

» This preference may be strict or may be made flexible by assigning a penalty

Prefer interline between routes

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

» This template restricts the basic case to <some_text>

» The <some_text> field is mandatory. The remaining items are optional.

» This preference may be strict or may be made flexible by assigning a penalty

Single route scheduling

Purpose:

<some_text>

Prerequisites: None.

Opening Dialog:

<picture>

Points to note:

» This template restricts the basic case to <some_text>

» The <some_text> field is mandatory. The remaining items are optional.

» This preference may be strict or may be made flexible by assigning a penalty