

# Package ‘ompr.roi’

June 11, 2018

**Type** Package

**Title** A Solver for 'ompr' that Uses the R Optimization Infrastructure ('ROI')

**Version** 0.8.0

**Description** A solver for 'ompr' based on the R Optimization Infrastructure ('ROI').  
The package makes all solvers in 'ROI' available to solve 'ompr' models. Please see the 'ompr' website <<https://dirkschumacher.github.io/ompr>> and package docs for more information and examples on how to use it.

**License** GPL-3

**LazyData** TRUE

**RoxygenNote** 6.0.1

**URL** <https://github.com/dirkschumacher/ompr.roi>

**BugReports** <https://github.com/dirkschumacher/ompr.roi/issues>

**Depends** R (>= 3.4.0)

**Imports** ROI (>= 0.3.0), slam, methods, Matrix, ompr (>= 0.8.0)

**Suggests** testthat, magrittr, ROI.plugin.glpk

**ByteCompile** Yes

**NeedsCompilation** no

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**Repository** CRAN

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as_ROI_model	<i>Export to ROI::OP</i>
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**Description**

This function can be used to transform an ompr model to a ROI::OP object.

**Usage**

```
as_ROI_model(model)
```

**Arguments**

model	an ompr model
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**Value**

an object of S3 class 'ROI::OP'

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ompr.roi	<i>A Solver for 'ompr' that Uses the R Optimization Infrastructure ('ROI')</i>
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**Description**

A solver for 'ompr' based on the R Optimization Infrastructure ('ROI'). The package makes all solvers in 'ROI' available to solve 'ompr' models. Please see the 'ompr' website <<https://dirkschumacher.github.io/ompr>> and package docs for examples on how to use it.

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with_ROI	<i>Configures a solver based on 'ROI'</i>
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**Description**

This function makes all solvers in the R package 'ROI' available to solve 'ompr' models.

**Usage**

```
with_ROI(solver, ...)
```

**Arguments**

solver	the 'ROI' solver name (character vector of length 1)
...	optional parameters passed to ROI_solve

Note: it does only support column duals. It currently does not export row duals.

**Value**

a function: Model -> Solution that can be used together with [solve\\_model](#).

**References**

Kurt Hornik, David Meyer, Florian Schwendinger and Stefan Theussl (2016). ROI: R Optimization Infrastructure. <<https://CRAN.R-project.org/package=ROI>>

**Examples**

```
library(magrittr)
library(ompr)
library(ROI)
library(ROI.plugin.glpk)
add_variable(MIPModel(), x, type = "continuous") %>%
  set_objective(x, sense = "max") %>%
  add_constraint(x <= 5) %>%
  solve_model(with_ROI(solver = "glpk", verbose = TRUE))
```

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