

Points_to Analysis

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1 Introduction

```
import cell from "effects.newgen"
```

```
import descriptor from "ri.newgen"
```

```
import approximation from "ri.newgen"
```

```
import statement from "ri.newgen"
```

The domains `points-to` indicates that an abstract memory location called *source* points to another abstract memory location called *sink*. The arc between the two locations may either always exist, and the approximation is EXACT, or possibly exist, and the approximation is MAY. The abstract memory locations may contain program variables or PIPS entities in their subscript expressions, and their values are constrained by the *descriptor*.

```
points_to = source:cell x sink:cell x approximation x descriptor
```

Note: the domains *approximation* and *descriptor* are documented in `ri.tex`. The `points-to` information is a list of `points-to` relations:

```
points_to_list = list : points_to*
```

This domain is used to associate its `points-to` information to each statement:

```
statement_points_to = persistent statement -> points_to_list
```