Basic
Iterator

Generates design iterations from a collection of sliders, panels, or valueLists.

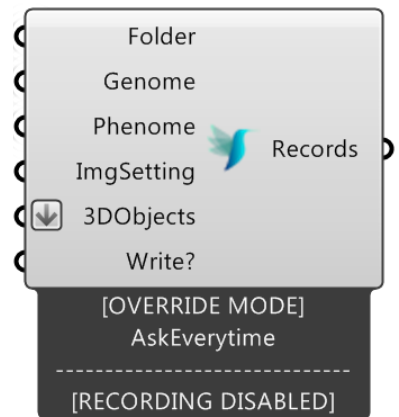| Input[N]	Value[N]
Selection	Genome
Fly	
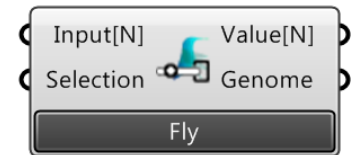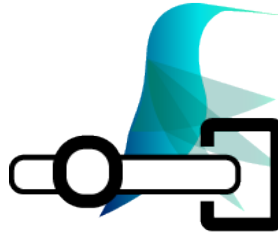
Basic
Parameter

Collects design parameters (us engineer types would call these 'performance metrics') to chart in Design Explorer. These will be the vertical axes to the far right on the parallel coordinates plot, next to the design inputs. These values should describe the characteristics of a single design iteration.
You can also combine this output as a static gene in Genome.

Data[1] → Parameters

Basic
Aggregator

Aggregates design data, images & Spectacles models into a data.csv file (and corresponding data set that data.csv links to) that Design Explorer can open.

Folder
Genome
Phenome
ImgSetting   Records
3DObjects
Write?

[OVERRIDE MODE]
AskEverytime

[RECORDING DISABLED]

Advanced
Img Setting

Defines how Colibri generates images during flights. You can specify which viewport[s] to capture, and the resolution of the image.

SaveAs
Views
Width   ImgSetting
Height
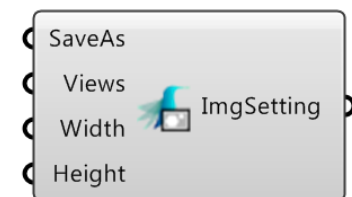
Advanced
Selection

Generates an iteration selection for the Colibri Iterator. This allows you to iterate over a subset of the design space instead of taking every step along every slider/dropdown/panel.

Use 'Divisions' to define granularity - how many steps to take on any given input.
Use 'Domain' to break the design space up into chunks that can be solved in parallel on different machines.

Divisions   Selection
Domains

1   2   3   4   97   98   99   100
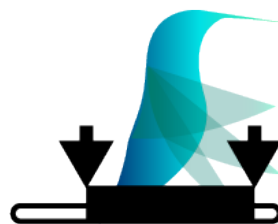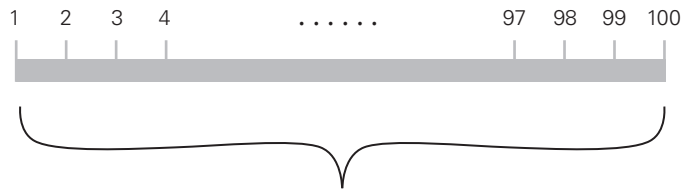
Collection "A"
100 items

$100 \times 50 = 5{,}000$ total Iterations

1   2   3   4   47   48   49   50

Collection "B"
50 items

CollectionA   ◇ 1

CollectionB   ◇ 1

CollectionA	CollectionA
CollectionB	CollectionB
Input[N]	Value[N]
Selection	Genome

Fly

ITERATION NUMBER
Total: 5000

Selection // Divisions

| 1 | 2 | 3 | 4 | . . . | 50 | . . . | 97 | 98 | 99 | 100 |

Collection "A"
100 items
3 items SELECTED

$3 \times 5 = 15$ Iterations
out of 5,000

| 1 | 2 | 3 | 4 . . . | 12 | . . . | 25 | . . . | 38 | . . . | 47 | 48 | 49 | 50 |
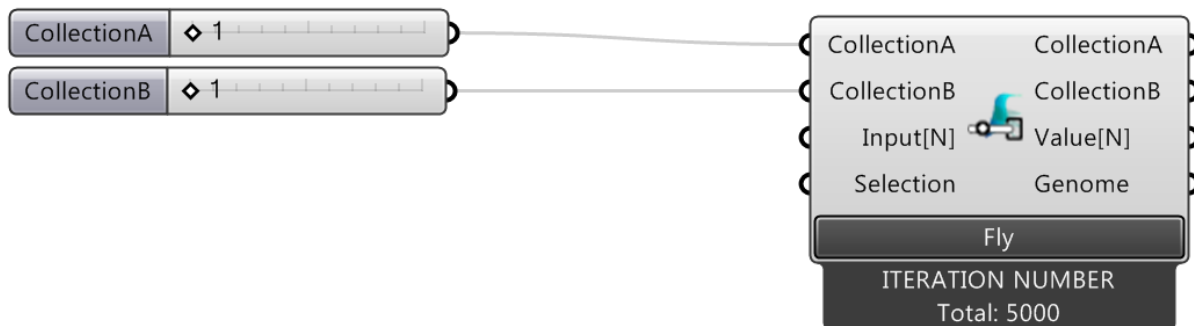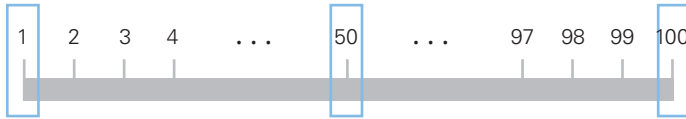
Collection "B"
50 items
5 items SELECTED

CollectionA ◇ 1 ————————

CollectionB ◇ 1 ————————

CollectionA	CollectionA
CollectionB	CollectionB
Input[N]	Value[N]
Selection	Genome

Fly

ITERATION NUMBER
Total: 5000
Selected: 15

------DIVISIONS------
CollectionA [3]
CollectionB [5]

{ 0 }

| 0 | 3 |
| 1 | 5 |

Divisions
Selection
Domains

1   2   3   4   97   98   99   100
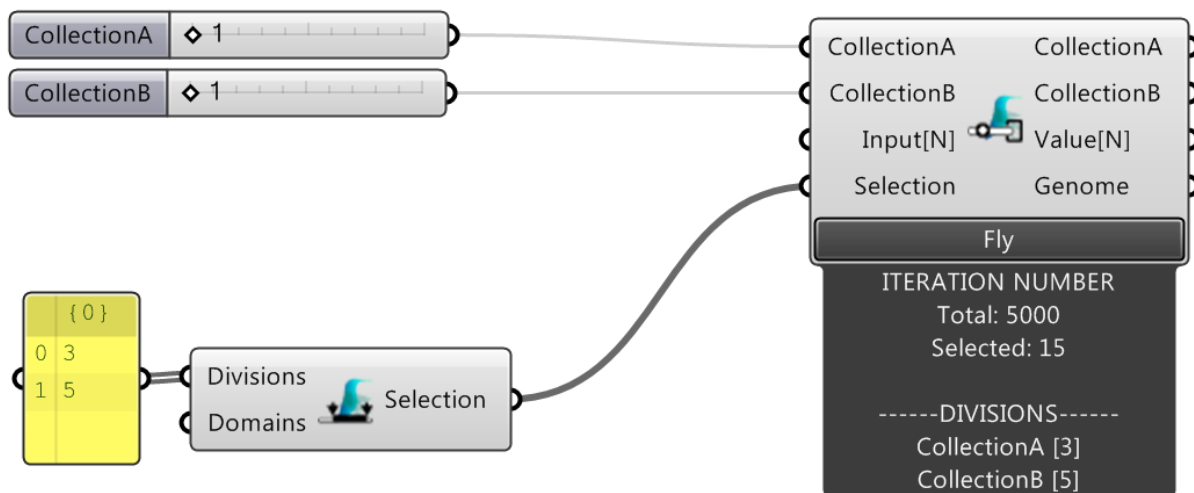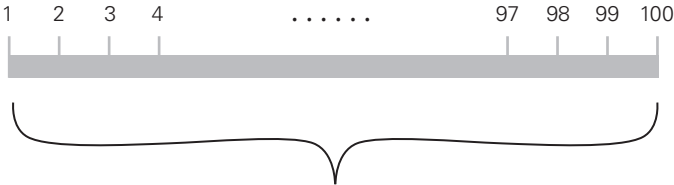
Collection "A"
100 items

100 x 50 = 5,000 total Iterations

101 SELECTED (index from 0 to 100)
out of 5,000

1   2   3   4   47   48   49   50

Collection "B"
50 items

CollectionA   ◇ 1 ————————————

CollectionB   ◇ 1 ————————————

CollectionA   CollectionA
CollectionB   CollectionB
Input[N]   Value[N]
Selection   Genome

Fly

ITERATION NUMBER
Total: 5000
Selected: 101

------DOMAINS------
0 TO 100 [101]

0

100

A 0 1
      I
B

Divisions
Domains   Selection
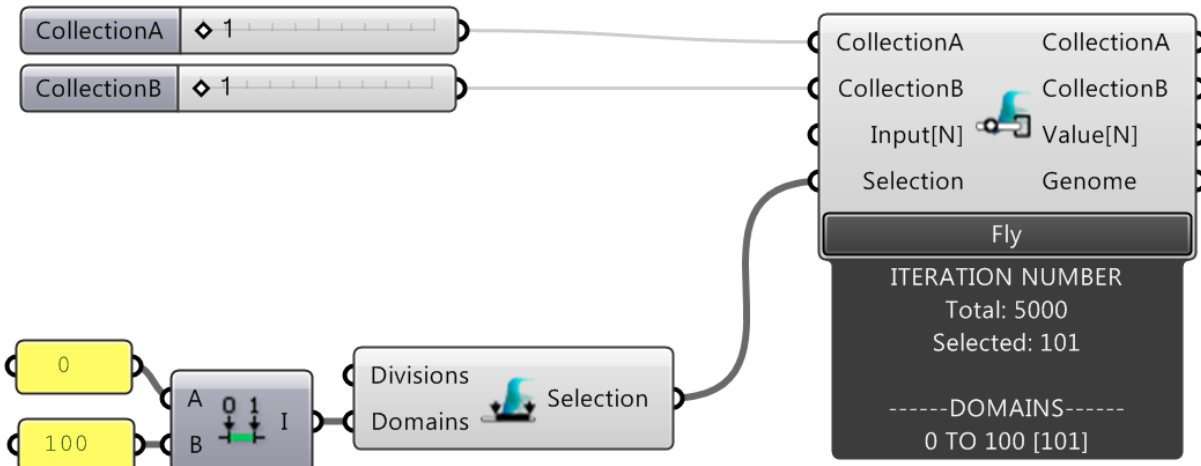
Selection // Divisions + Domains

1 2 3 4 . . . 50 . . . 97 98 99 100	

Collection "A"
100 items
3 items SELECTED

1 2 3 4 . . . 12 . . . 25 . . . 38 . . . 47 48 49 50
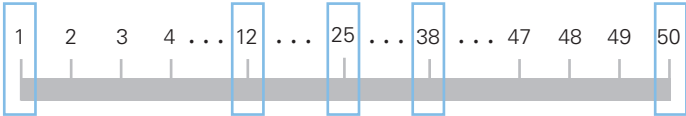
Collection "B"
50 items
5 items SELECTED

3 x 5 = 15 Iterations
out of 5,000

11 SELECTED (index from 0 to 10)
out of 15

CollectionA ◇ 1 ———————
CollectionB ◇ 1 ———————

CollectionA   CollectionA
CollectionB   CollectionB
Input[N]   Value[N]
Selection   Genome

Fly

ITERATION NUMBER
Total: 5000
Selected: 11

------DIVISIONS------
CollectionA [3]
CollectionB [5]

------DOMAINS------
0 TO 10 [11]

{ 0 }
0 3
1 5

Divisions
Domains   Selection

0
10

A 0 1
      I
B