

## DOCUMENTATION

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## NAVIGATION

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Package: [Routers\\_Configuration\\_Structures](#)

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## DESCRIPTION

package Routers\_Configuration\_Structures is

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## TYPES

### Preconfigured\_Topologies

• [Goto declaration in source\\_](#)

type Preconfigured\_Topologies is (Line, Ring, Star, Fully\_Connected, Tree, Mesh, Torus, Hypercube, Cube\_Connected\_Cycles, Butterfly, Wrap\_Around\_Butterfly);

#### References:

[routers\\_configuration\\_structures.ads:9:9](#) (declaration)  
[routers\\_configuration\\_structures.ads:14:29](#) (reference)  
[test\\_routers.adb:26:77](#) (reference)  
[test\\_routers.adb:55:72](#) (reference)  
[test\\_routers.adb:314:57](#) (reference)

### Test Modes

• [Goto declaration in source\\_](#)

type Test\_Modes is (One\_To\_All, All\_to\_One);

#### References:

[routers\\_configuration\\_structures.ads:11:9](#) (declaration)  
[routers\\_configuration\\_structures.ads:23:29](#) (reference)  
[test\\_routers.adb:40:77](#) (reference)  
[test\\_routers.adb:64:72](#) (reference)

### Command\_Line\_Options

• [Goto declaration in source\\_](#)

```
type Command_Line_Options is record
  Selected_Topology   : Preconfigured\_Topologies := Cube_Connected_Cycles;
  Size                : Positive                := 20;
  Degree              : Positive                := 3;
  Depths              : Positive                := 4;
  Dimension           : Positive                := 3;
  Print_Connections   : Boolean                 := True;
  Print_Distances     : Boolean                 := True;
  Routers_Settle_Time : Duration                := 0.1;
  Comms_Timeout       : Duration                := 0.1;
  Test_Mode           : Test\_Modes              := One_To_All;
  Dropouts            : Natural                 := 0;
end record;
```

#### References:

[routers\\_configuration\\_structures.ads:13:9](#) (declaration)

[generic\\_routers\\_configuration.ads:9:30](#) (reference)  
[routers\\_configuration\\_structures.adb:7:53](#) (reference)  
[routers\\_configuration\\_structures.adb:9:13](#) (reference)  
[routers\\_configuration\\_structures.ads:27:53](#) (reference)  
[test\\_routers.adb:19:30](#) (reference)

## SUBPROGRAMS & ENTRIES

### Get\_Topology

- [Goto spec in source\\_](#)
- [Goto body in source\\_](#)

function Get\_Topology

```

    Co
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    _Li
    ne                                     : Command\_Line\_Options)
    (                                     return Topology\_Kind'Class;
    _P
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```

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#### References:

[routers\\_configuration\\_structures.ads:27:13](#) (declaration)  
[generic\\_routers\\_configuration.ads:13:58](#) (call)  
[routers\\_configuration\\_structures.adb:7:13](#) (body)  
[routers\\_configuration\\_structures.adb:23:3](#) (label)

#### Calls:

[Topologies.Butterfly](#) defined at [topologies.ads:25:13](#)  
[Topologies.Cube\\_Connected\\_Cycles](#) defined at [topologies.ads:24:13](#)  
[Topologies.Fully\\_Connected](#) defined at [topologies.ads:19:13](#)  
[Topologies.Hypercube](#) defined at [topologies.ads:23:13](#)  
[Topologies.Line](#) defined at [topologies.ads:16:13](#)  
[Topologies.Mesh](#) defined at [topologies.ads:21:13](#)  
[Topologies.Ring](#) defined at [topologies.ads:17:13](#)  
[Topologies.Star](#) defined at [topologies.ads:18:13](#)  
[Topologies.Torus](#) defined at [topologies.ads:22:13](#)  
[Topologies.Trees](#) defined at [topologies.ads:20:13](#)  
[Topologies.Wrap\\_Around\\_Butterfly](#) defined at [topologies.ads:26:13](#)

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