

CAST Architecture Checker - Define Layers, Sets and Dependencies

- [Introduction](#)
- [Create a Layer or Set](#)
- [Create a dependency](#)

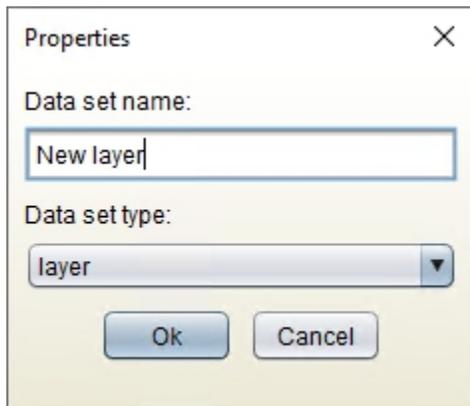
Introduction

Once you have created your initial model (see [Define a new Architecture Model](#)) you need to define your Layers, Sets and Dependencies - i.e. the actual structure (architecture) of the application you are targeting. This section explains the how to get started. See the [Glossary](#) for a description of Layers, Sets etc.

Create a Layer or Set

To create a new layer or set:

Right click in white space in the [Main window \(Model tab\)](#) and select the **New layer** or new set option as appropriate. A Properties dialog box will be displayed enabling you to enter a **name** for the layer/set. Ensure the **Data set type** drop down list is set correctly:



The screenshot shows a 'Properties' dialog box with a close button (X) in the top right corner. It contains two input fields: 'Data set name:' with the text 'New layer' entered, and 'Data set type:' with a dropdown menu showing 'layer'. At the bottom, there are 'Ok' and 'Cancel' buttons.

Click **OK**. The new layer or set will appear in the [Main window \(Model tab\)](#):

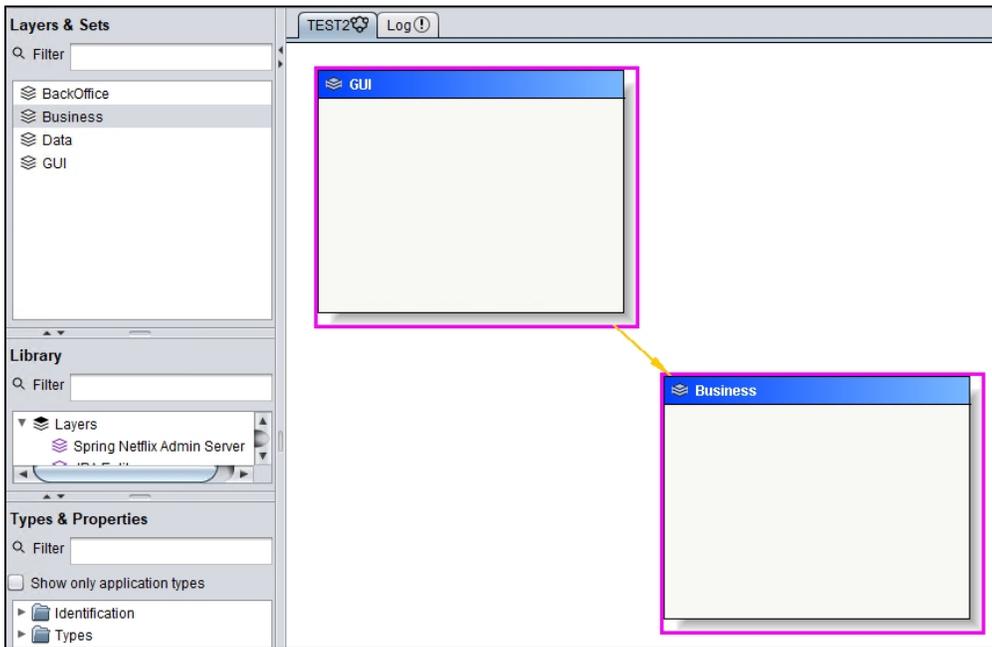


To begin configuring your layer, see [Define Layer or Set Contents](#)

Create a dependency

To create a dependency between two layers, click on a Layer in the [Main window \(Model tab\)](#). When the Layer is highlighted, you can then drag the mouse to the destination Layer and drop to create the dependency, as shown on the screenshot below:

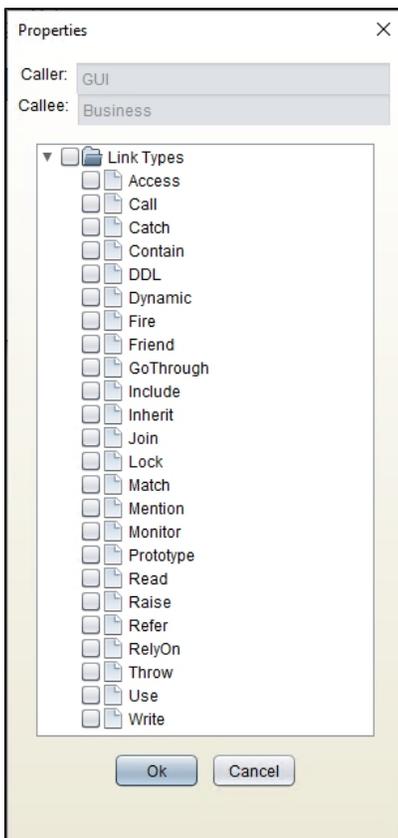
Click to enlarge



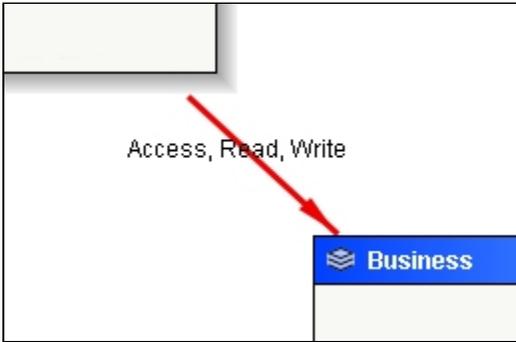
Dependencies will be coloured as follows:

- **GREEN** - for dependencies between Layers or Sets when you have chosen an "authorized" Architecture Model type
- **RED** - for dependencies between Layers or Sets when you have chosen a "forbidden" Architecture Model type See [Define a new Architecture Model](#) for more information about the model type.

Once the dependency is created you can further configure it by defining the **type of links** between the two layers that are authorized/forbidden (depending on your model type - see [Define a new Architecture Model](#)). Right click the dependency (i.e. the red or green arrow) and select **Properties**. A dialog box will then be displayed enabling you to choose the link types that are relevant (you can choose more than one):



Click **OK** to complete the configuration. The link types will be displayed together with the dependency:



- Dependency direction is indicated by the arrow head.
- Layers can depend on each other, therefore you can define dependencies in **both directions** between two layers.
- You can delete Dependencies by right clicking the dependency and selecting **Remove**.
- The definition of a link type is useful if you specifically want to check that links between objects don't violate your model. For example if your model type is checking "Authorized" dependencies (see [Define a new Architecture Model](#)) and you define a dependency between two layers with a **Read** link type, this means that any other link types that exist between the two layers will be flagged as a violation when you use the [Check model](#) option.
- It is not mandatory to define a link type for a dependency. In this case any dependency between objects in the two layers will be considered.
- You can allow a layer to **call any layer** and be **called by any layer** - see [Using the calls any or called by any layer option](#).