

Getting Started

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Basic concepts

Kiuwan Architecture is based on some basic concepts you should understand.

As formerly said, Kiuwan Architecture automatically builds a map of a software system. That map is known as a **Model**.

The Model is automatically built upon reading source code provided to Kiuwan and will be associated to an **Application**.



A **Model** is a directed-graph composed of **Components** and **Relations** among them.

Similarly to code analyses, an application may have many models depending on how many times that application has been analyzed. Once you have selected an application, you can select the model based on the date (and label) you ran the analysis. Obviously, every model will be different because every analysis was run against different source code.



A **Component** is any *entity* found during inspection of source code.

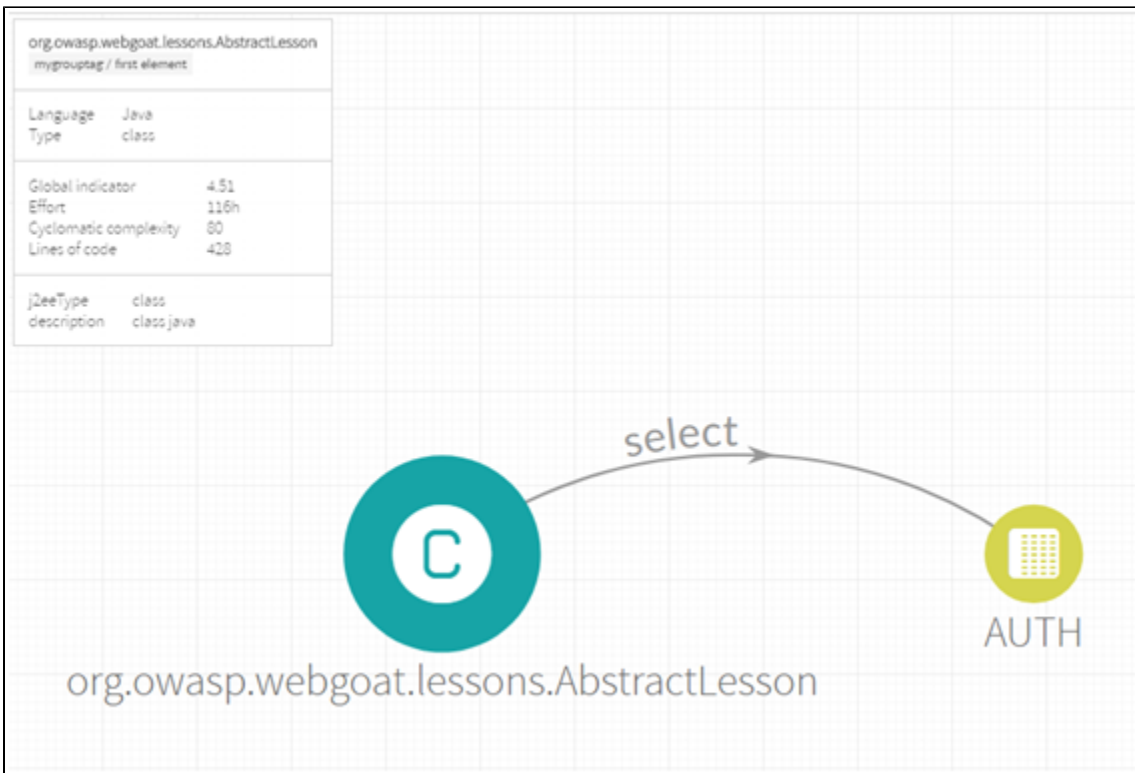
A component can be any software entity such as a class, a configuration file, a database, a table, a web service, etc.etc. Every component has a *name* (that uniquely identifies it), a *type*, an associated programming *language*, a physical *file*, as well as associated *properties*. Also, a component can be "*Analyzed*", i.e. found during analysis process because it's associated to an artifact (typically, a file), or "*Inferred*" (it was discovered because some other component refers to it but it was not found an artifact for it).



A **Relation** is any *association* between two components.

Depending on the nature of the components, the relation can be of different *type* (calls, contains, includes, inherits, insert, etc.). Also, a relation has a *direction*.

As an example, the next image shows two components (a java class and a database table) where the relation is "select" (the java class is accessing the table through a "select" statement). You can also see the properties associated to the java class.



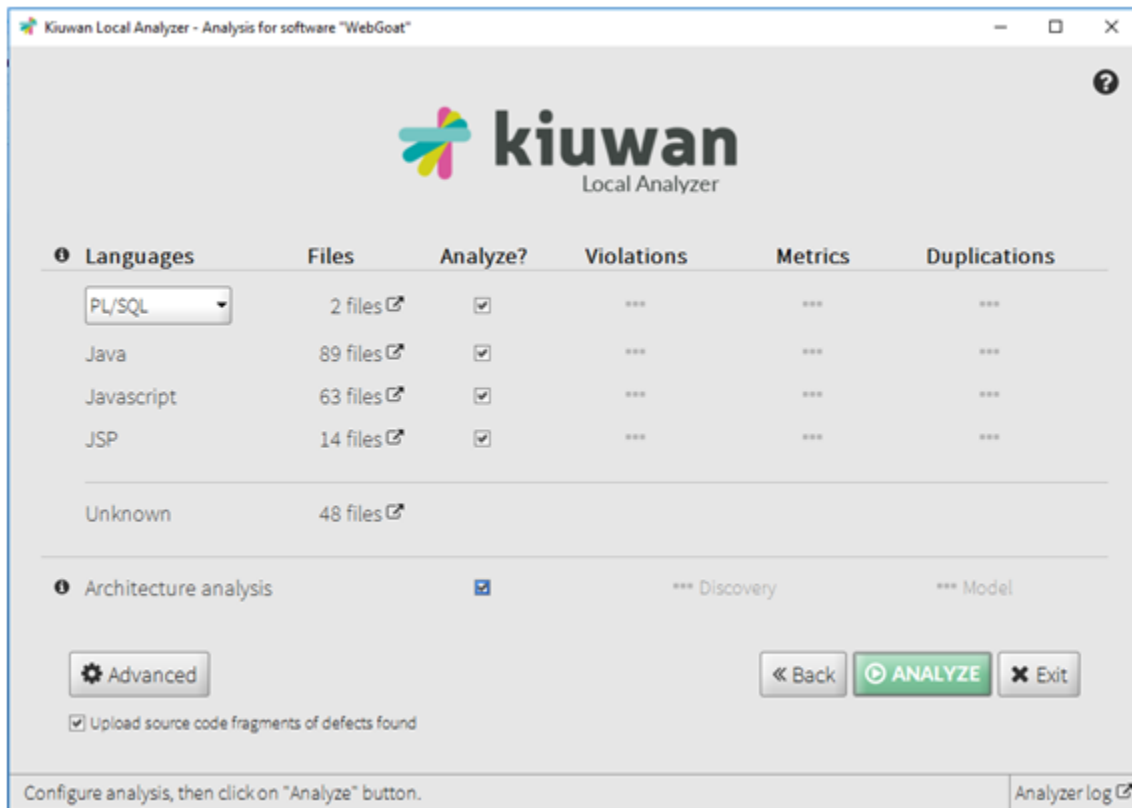
Components and Relations are building blocks of Kiuwan Architecture and they will be thoroughly used during this documentation.

How to build a Model



A Model is **automatically built** during the analysis of the source code of an application.

To build a model you must use [Kiuwan Local Analyzer Deprecated](#).



The model will be built when “Architecture analysis” is checked.

After the analysis is finished you will be able to access the model in Kiuwan Dashboard by selecting the right application and analysis and accessing the **Architecture** Section.

CODE SECURITY

CODE ANALYSIS

ARCHITECTURE

LIFE CYCLE

GOVERNANCE

Luis Garcia

FILTER

COMPONENTS

BROWSER

IMPACT ANALYSIS

2017/07/01 - 2017/07/19

ANALYZE

webgoat7.1 » Analysis

2017/07/19 14:40

BROWSER

Name contains

Name NOT contains

Language

Type

Relations

Analyzed / Inferred

Group by

File

Tag

+ Filters

Apply

Clear

196 components in 10 groups

Graph options

Now you are ready to fully work with your model by using [Components](#), [Browser](#), and [Impact Analysis](#).