

Our database contains a single graph representing all Grasshopper documents (aka scripts, models) that we load into the database. The elements of the database are nodes and edges, both of which are labelled with different labels.

Types of nodes

Each node has a label called **Type** whose value corresponds to the node type as shown below:

ComponentDefinition

The definition (aka an actual implementation) of a component. This is independent of Grasshopper documents.

Labels

- [ComponentGuid](#)
- [Name](#)
-

Outgoing edges to

- One: PluginVersion

Incoming edges from

- Many instance

ComponentInstance

An instance of a component in a document.

Labels

- [InstanceGuid](#)
- [NickName](#)
- [X](#)
- [Y](#)

Outgoing edges to

- One: ComponentDefinition
- 0-Many: ComponentInstanceOutput

Incoming edges from

- 0-Many: ComponentInstanceInput
- One: DocumentVersion

ComponentInstanceInput

Labels

- [InstanceGuid](#)
- [NickName](#)
- ReverseRe
- [DataMapping](#)
- [Simplify](#)

Outgoing Edges to

- One: ComponentInstance
- One: ComponentDefinition

Incoming Edges from

- 0-Many: ComponentInstanceOutput

ComponentInstanceOutput

An output of an instance of a component.

Labels

- [InstanceGuid](#)
- [NickName](#)
- Reverse
- [DataMapping](#)
- [Simplify](#)

Outgoing edges to

- One: ComponentDefinition
- 0-Many: ComponentInstanceInput

Incoming edges from

- One: ComponentInstance

DocumentVersion

A version of a grasshopper document.

Labels

-
- / CommitID
- Timestamp
- Name
- Copyright
- Description

Outgoing edges to

- 0-Many: ComponentInstance
-

Incoming edges from

- One: Document

Document

A grasshopper document.

Labels

- [DocumentID](#)

Outgoing edges to

- 1-Many: DocumentVersion

Incoming edges from

-

PluginVersion

A version of a plugin.

Labels

- [Version](#)

Outgoing edges to

- Plugin

Incoming edges from

-

Plugin

A plugin.

Labels

- [Name](#)

Outgoing edges to

-

Incoming edges from

- PluginVersion

Template node

Labels

-

Outgoing edges to

-

Incoming edges from

-

Types of edges

Each edge has a label called **name** whose value corresponds to the edge type as shown below.