

goma

gsobell

last updated: February 28, 2023

Contents

0.1 Preface

[goma](#) is a go engine, and it's scope and functionality is therefore limited to being an engine. For a go controller, see [dango](#). For clarity, all mention of groups will refer to chains, that is, groups that are connected.

1 GTP Implementation and Conformation

According to the Go Text Protocol (GTP) documentation: An engine is expected to keep track of the following state information:

- board size
- board configuration
- number of captured stones of either color
- move history
- komi
- time settings

All implementations are required to support the following commands:

- | | |
|--------------------|---------------|
| • protocol_version | • boardsize |
| • name | • clear_board |
| • version | • komi |
| • known_command | • play |
| • list_commands | • genmove |
| • quit | |

2 State

The stones are stored both as a 2D array, and as a list of lists, one for each color. Each list in the list is a group. Black is -1, white is 1, empty spot is 0.

2.1 Board

The board is stored as a 2D array.

2.2 Stones

2.2.1 Groups

2.2.2 Empty

3 Logic

3.1 Weighing Move Priority

3.2 Capture

3.3 Defense

3.4 Heuristics

4 Additional Resources