

# FIIT Grid - Distributed Computing @ FIIT

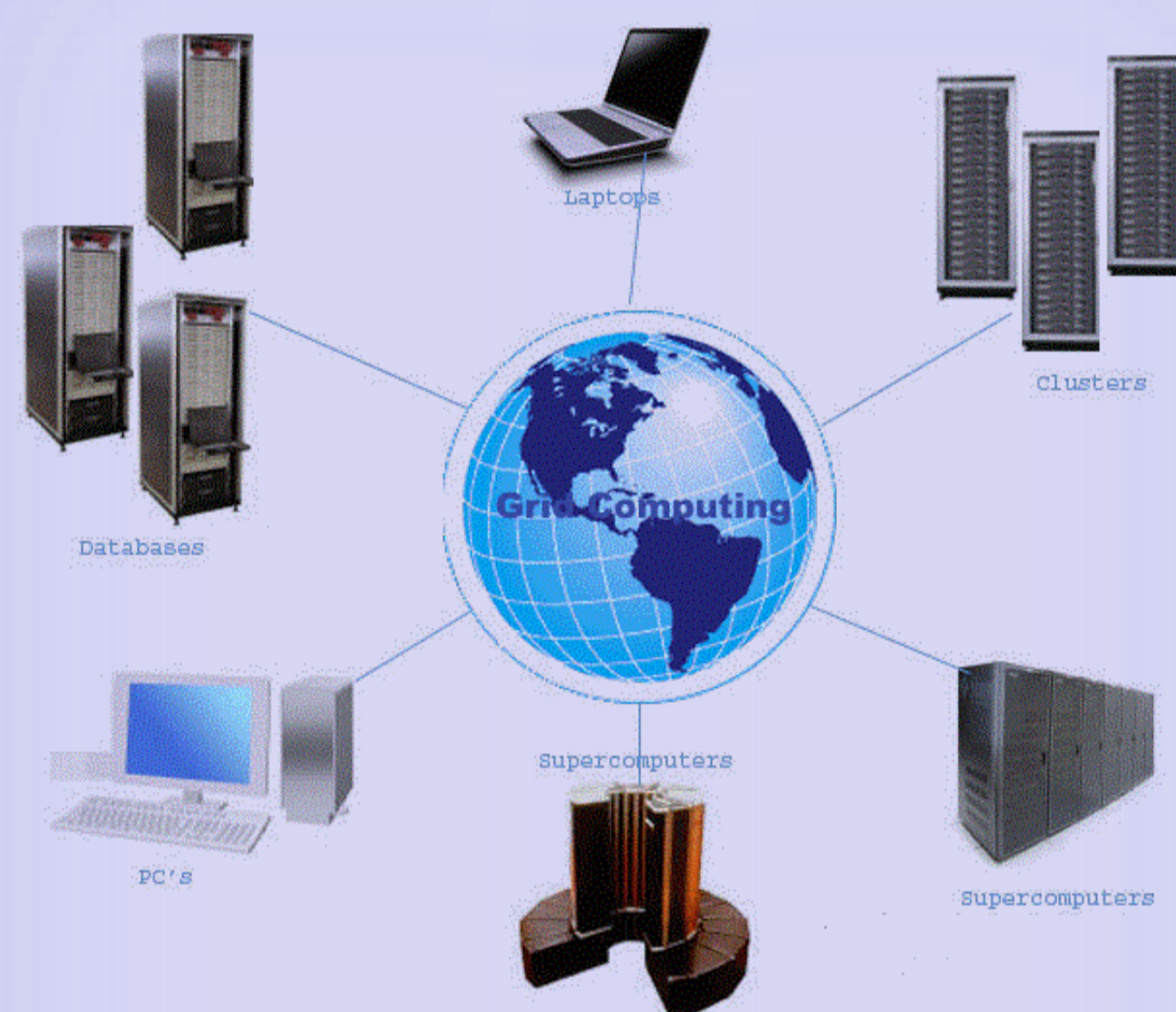


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boinc.fiit.stuba.sk



## FIIT Grid

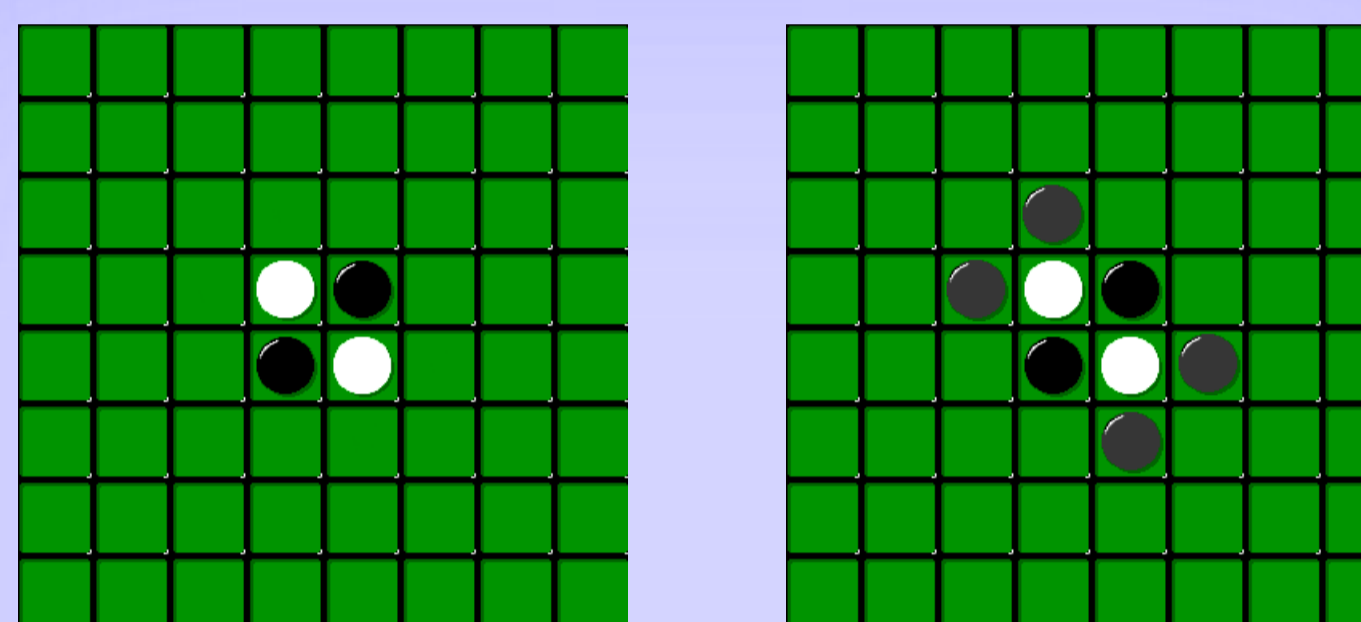


The goal of this project was setting up BOINC server to be used for educational and research purposes. Researchers will be able to easily test their own algorithms distributed way.

Obtained skills are transformed into materials for university researchers, which are in need for greater computing performance for their own projects.

[team12-13.ucebne.fiit.stuba.sk/wiki](http://team12-13.ucebne.fiit.stuba.sk/wiki)

## Reversi aka Othello



A strategy board game for two players, played on an 8x8 uncheckered board. Each of the disks' two sides corresponds to one player. Black starts.

**Size 6x6**

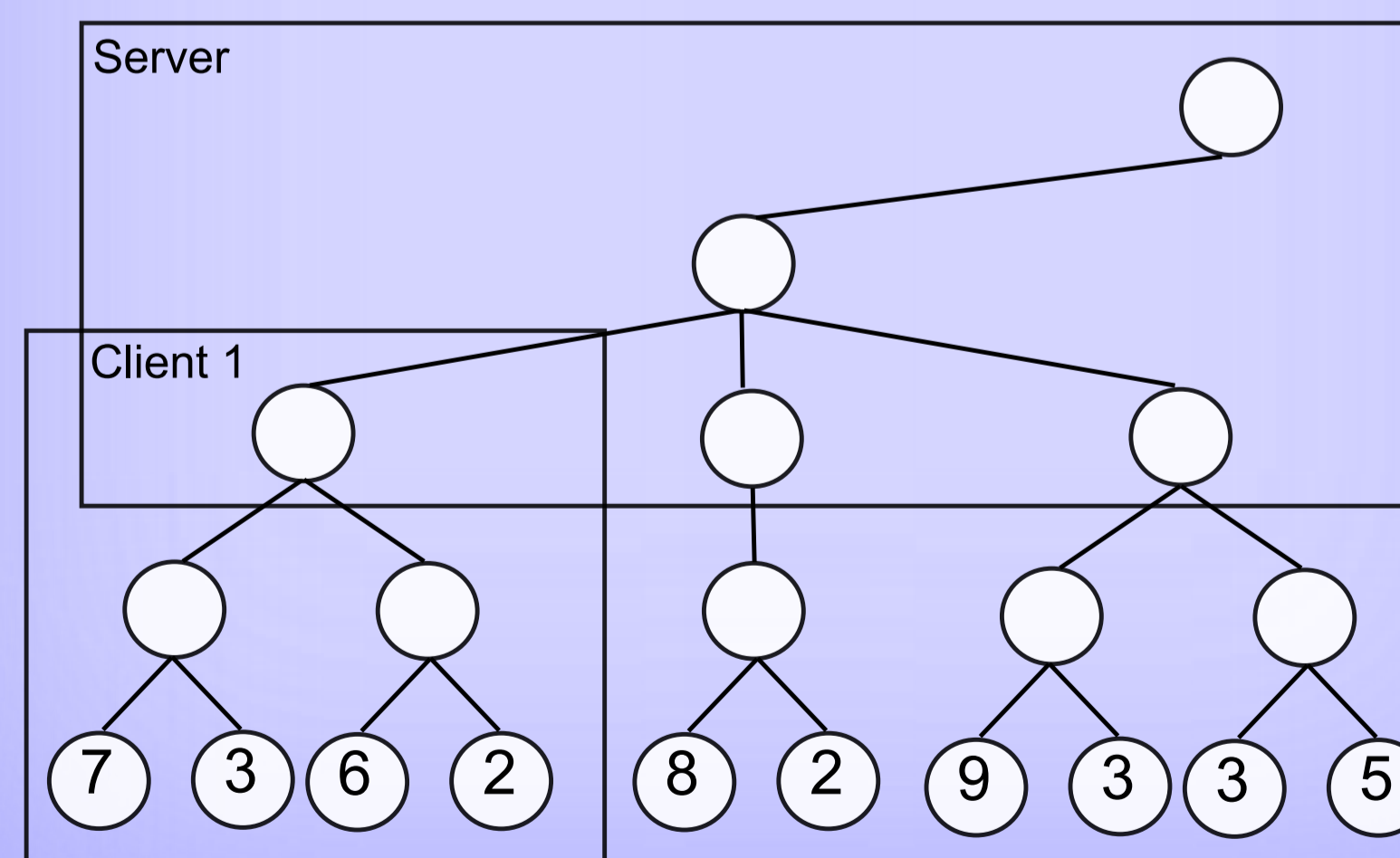
$10^{11}$  legal positions

Solved on one computer using min-max method.

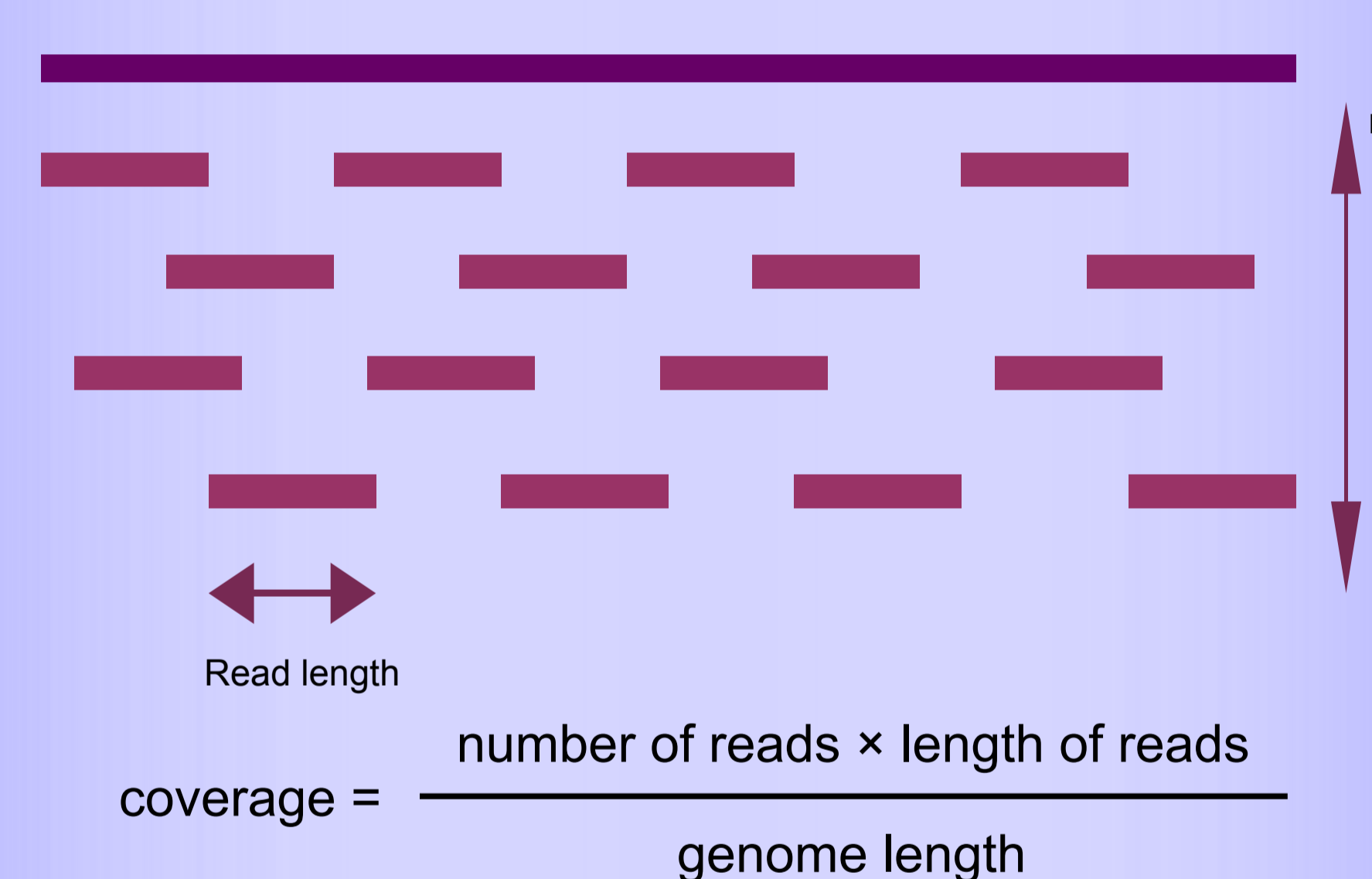
Result: White wins +4 margin

**Size 8x8**

$10^{28}$  legal positions, game-tree complexity  $10^{58}$  unsolved, computer analysis shows a likely draw.



## DNA



We have genome consisting of nucleobases **accgcttacacgctttac**. The question is, how many times must be the sequence **cgctt** present in read fragments to determine the original number of sequences in reference genome for given read length, error model and coverage? Long journey consisting of simulations, statistics and distributed computing.

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