

Java RMI

- Where with RRCs you can solely call **remote functions** exported into a server, with **Remote Method Invocation (RMI)** you can have references to **remote objects** and invoke their **methods**.

instance methods

RMI Registry

This is the place for the server to register the services it offers and the place for clients to query those services.

Words on Parallel Computing

- Parallel computing means using multiple processors (cores) within the same computer.
- Two common problems: Some computations are hard or impossible to parallelize. More cores doesn't always mean more speed up.

Amdahl's Law

Shows that unless a program is 100% efficient at using multiple cores, you will receive less and less of a benefit by adding more cores.

$$\text{running time} = b + t \cdot \left(1 - x + \frac{x}{p}\right)$$

b: time it takes to setup, synchronize and communicate between cores.
x: proportion of your application that you can speed up by parallelization.
p: number of cores
t: a program runs on one machine in time t.
speed up = sequential time / parallel time