Location-Based Routing

An overview and possible directions for GeoCRON

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Introduction

- Traditional routing
  - Unique address
  - Source routing
  - Distance-vector
- Why location information?
  - Latency: request from closer server, route locally when possible
  - Congestion: confine route requests to smaller regions (MANETs)
  - Recovery: avoid problematic areas of the network
  - Geocast: deliver messages to all (or some) nodes in target region
  - Energy: closer nodes need less radio power to reach
  - Sensors: regional event detection, spatial querying
  - Planning: paths (robots), surveillance cameras (focus on area target will appear next)

Overview

- Location service
- Clustering
- Geometric

Location Service

mention voids

Geometric Routing

right-hand rule analagous to following the right hand wall in a maze
introduced in Compass Routing on Geometric Networks