The Mission

- REST Endpoints
  - Establish a network of REST endpoints

- Rationale
  - Effective way of providing web resources
  - Easy to work with the resulting info
REST Endpoints

- http://.....

Representational (represents resources)
State (all information such as login)
Transfer (each request)
REST Endpoint Examples

- http://www.sample.com/phonebook/UserDetails?firstName=John &lastName=Doe
Presentation Outline

- Technological background
- First generation
- Second generation
- Third generation
- Conclusion
Technological Background

- The three components of web mapping
  - Web server
  - Map server
  - GIS database
Technological Background 1

- The web server
  - Connections
- Communication

TCP: The phone numbers of the Web
NAIT: 132.67.45.18
GC: 178.45.56.18
Localhost: 127.0.0.1

IP: Sending a letter as small post cards
1
2
3
4
5
Technological Background 2

- The map server
  - GIS program
- Input/output
Technological Background 3

- The GIS database
  - Database
  - Rendering mechanism
1st Generation Web Mapping

- The laborious way
  - Transparent
- Tons of programming

http://127.0.0.1:8008/mapguide/mapagent/mapagent.fcgi?
OPERATION=GETMAPIMAGE& VERSION=1.0&
MAPNAME=Sheboygan& LOCALE=en&
MAPDEFINITION=Library%3A%2F%2FSamples%2FSheboygan%2FMaps%2FSheboygan.MapDefinition&
FORMAT=PNG&
SETVIEWCENTERX=-87.73& SETVIEWCENTERY=43.74& SETVIEWSCALE=10000&
SETDISPLAYWIDTH=3000& SETDISPLAYHEIGHT=2100
http://www.mapserver.web/mapping?
OPERATION = GETMAPIMAGE
SETX = -87.72
SETY = 43.74
SCALE = 5000

http://www.mapserver.web/mapping?
OPERATION = GETMAPIMAGE
SETX = -87.73
SETY = 43.74
SCALE = 5000
2nd Generation Web Mapping

- More robust
  - Commercial software tools
  - Faster tools, easier programming
3rd Generation Web Mapping

- The future is here
  - Faster and easier than ever
  - It’s free
  - REST endpoints
Conclusions

- Increased quality control
  - Crowd sourcing
- Faster response time
  - Facilitate external dev.
- Focus on core business
  - Eliminate costly development