

Robo-Corporation Prototype Overview

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Overview

In the same way that code is law, law can also be code. One of the most interesting applications of this idea may be in form of the *autonomous corporation*, legal business entities whose actions are driven entirely by computers. Autonomous corporations operating automated transactions conducted by electronic agents under electronic contracts may have numerous applications in the future of business and online marketplaces generally.

To date, these legal entities remain conceptual at best, and there exists no simple way for developers to experiment with the concept. However, the statutes and practice supporting electronic transactions is well matured. For the first time this summer, we would like to develop a true proof of concept for this idea by prototyping the first autonomous corporations, and then opening the basic codebase up for all to use.

This would take the form of a toolkit that will allow developers to quickly set up an LLC and associated bank account, and then code that LLC to behave programmatically according to certain rules. The toolkit will contain modules for the company to perform actions like form electronic contracts, trade virtual or physical assets, create subsidiaries, and merge with other interoperable LLCs. These modules could be set to trigger on particular phenomena detected by the LLC, including the vote of a holding company board or external events like a news story appearing online or the behavior of another business entity. By documenting the architecture, interfaces, inputs, outputs and message formats, others can improve our code, or develop their own interoperable code offering alternative types of corpbots.

Proof of Concept

As a proof of concept, the immediate project will be to use this codebase to launch a cluster of autonomous LLCs which trade the same single physical or virtual asset (e.g. a chair, or domain names) back and forth with one another for some amount of money. This would happen without any human involvement to coordinate the transfer of the asset from one company to the other. It would manage all the legal paperwork (bills of sale, transfer of funds, etc) for these transactions.

Schedule and Budget

If the money can be secured, work would begin in mid-June, with a target deadline of mid-September for the launch of the proof of concept and the open sourcing of the codebase. This would be accompanied by a launch conference held at Harvard or MIT where we will share our work and encourage developers to participate in extending the idea forwards.

The budget would go to pay for the time of one developer, and a second developer who would also double as a project manager -- we are estimating \$20,000 split evenly between the two. We are currently looking for a project partner who would be interested in helping us fund this work.