CROWN PAPER

3.0   APPLICATIONS

The Core Dev Team
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The cognitive surplus, newly forged from previously disconnected islands of time and talent, is just raw material. To get any value out of it, we have to make it mean or do things.
- *Clay Shirky. <u>Cognitive Surplus</u>.*

Problems change and require fresh analysis. The best people ought to think about such problems no matter what their formal credentials may look like. Carnegie said Americans used to believe, "The tools to those who can use them!" What a completely revolutionary slogan that is.
- *Jonathan Hughes. <u>The Vital Few: The Entrepreneur and American Economic Progress</u>*

We have to look for routes of power our teachers never imagined, or were encouraged to avoid.
- *Thomas Pynchon, Gravity's Rainbow*

DISTRIBUTED OPPORTUNITIES

Let's start with the big picture and what this is all about – which has nothing to do with coins or tokens. We are building a distributed system to distribute opportunities. Having the power to control the distribution of opportunities is the source of many economic profits and rents – so just to be clear, to truly distribute opportunity we will have to create an independent open source technology stack in collaboration with other enterprises. This is all just the first step.

This is not a new idea, just another iteration of what Carnegie expressed as an American belief of offering "the tools to those who can use them." We are not unique or even among the first to have this vision. The importance of the equality of opportunity was rigorously and analytically presented by Jon Rawls in the early 1970's – before most of the members of the Crown Core team were born. Clearly not our idea, or new.

What is new with Crown is exactly how we plan to combine different open source technologies which Rawls' couldn't have imagined. In bringing this portfolio of technologies together around a shared public key infrastructure called the Chronicle, we are focusing on a few key features: (1) usability -- clear logical structure and application feedback and user interaction models, (2) dual mode – a way to support draft or temporary activities as well as activities committed to the permanent record, (3) open and application agnostic – we aren't attaching a coin to single application, but precisely the opposite – attaching a coin to any open source application you can build. Crown will provide some utility instances and applications, but unlike any other cryptographic project we are aware of, Crown is dedicated to building a durable open application platform.

This is what a distributed system should be. As Clay Shirky expressed, the system will be "forged from previously disconnected islands of time and talent." That's what the Crown Core Dev team is -- *previously disconnect islands of time and talent*, and it is probably an apt description of people whom we don't know yet who may make essential contributions in the near future.

OPEN & AGNOSTIC
> *If the core of science is discovery, then the essence of engineering is creation. Going back to the very roots of human history, as a civilization we were tool builders before we were discoverers.*
> - *Guru Madhavan. Applied Minds: How Engineers Think*

Software engineering is about the creation of new abstract systems of work, or play. The Crown platform will be a place for engineers and individuals to both work and play. Some of these activities and applications will make use of the permanence of the Chronicle and others will just make us of the Crown token and public-private key infrastructure. As stated in the first paper, the power of the platform will come from a shared imagination. Setting up the platform involves our imagination, but everything after that will be driven by yours.

We can only do this by keeping the core team and core platform free of conflicts and outside corporate interests. This is the underlying motivation for the governance structure, or the simple social contract set out in The Knowledge, which defines membership in Crown community. It makes no sense to offer an open platform without simultaneously attempting to create a sustainable governance structure which reflects a commitment to keep the platform open.

PERSISTENT & EPHEMERAL
Some of the applications running on the Crown platform will be persistent or continuous and some will be ephemeral, or temporary. All applications running on the platform will be managed by the Trons, which will be Crown Nodes running in Server mode. Open source projects will have the open to have their applications run on the Crown network with the Tron's providing and managing the resources the application requires. Proprietary projects will be able to utilize Crown for user verification and billing, but will not have the option to run their code on the network.

Applications will be able to communicate with the Trons managing the server level of the network and application resource provisioning, as well as the application user. The specific set of public private key protocols which will be available to applications will be determined in the implementation design, but we expect to offer multiple protocols.

GETTING STARTED
For existing open source projects, the process of creating an application which can be run on the Crown network could be as simple as adding some code to coordinate any required network resources, negotiate sign-on and sign-off, and billing/usage tracking on the Crown Network.

Then registering the application with the network. The registration process would include a code review for open source projects which would run on the network as a check step, as well as basic profile information. Once registered with the Crown Network, users would be able to launch the application from an interface in their Journal.

THIS IS A BUSINESS
If the Crown Platform is successful, building applications and operating server nodes on the Crown Platform will both be profitable businesses. The total fee for the use of an application on the Crown platform would include (1) a fee to the creator of the application which would be set

by the app's owner and which could also be split with the Tron operator (or not) at the discretion of the application owner, (2) a network resource fee structured to provide the Trons (Crown Network Server Nodes) with a 20% gross margin on incremental services offered or priced at a 25% mark-up to the Tron operator's costs.

The logic behind this structure is to bring a sort of Costco loyalty and pricing model to the network services space. The goal of the Tron operators will be to secure network resources at attractive rates and pass and savings along. The effectiveness of the Trons in doing this could help bring people back, creating both profitability and stability for both the Tron operators and the users of the applications. The analog to Costco is based on their 5% mark-up of their inventory above their cost for members.

Each Tron operator will have the ultimate decision on how they price their compute capacity and their abilities to spin up and down additional network resources. Different Trons will have different capabilities and the role of the Crown Core Software will be in setting the requirements for Trons to sign on to the network.

Each application provider will also have discretion over the total price for their app and the percent of that revenue which they would like to share with the network, and how. The Crown Platform will not charge a fixed percentage of revenue to applications and it will also not tell them how to price their offerings. If they choose to share their revenues with the platform, the application providers will specify if they want those revenues to go to (1) the Tron managing the application, (2) shared evenly across all of the Trons on the network, (3) the Crown development Fund to accelerate new feature development on the platform, (4) the block reward system.

The purpose of this pricing discussion is to share some of our thoughts about how the Crown Network might be utilized as a platform for businesses. The Trons will be structured as stable margin businesses where more money will be made by providing more compute resource to the network and running more applications. Trons will be incented to grow the network capacity to grow their profits. Application providers will be offered a platform where they will have more control over their product's pricing and more transparent usage data and efficient billing than is possible anywhere else.

The platform's focus on usability and usefulness will also be a source of strength. Usability isn't just about the code and the user interface, it is also about how you fit into people's lives -- whether you help them do their work better or have more fun. A stable and attractive platform for node operators and software developers to earn money from isn't just about business – it's about providing tools of use to people in their lives. The value of this daily use will drive the value of the businesses.

Hopefully this brief discussion has been useful to you in understanding what we are trying to achieve at Crown. As always, if this sound interesting to you and you want to get involved, let us know you are interested.