Pursuant to section 3.1.1.6 of the [Factom Protocol Governance Document](https://bit.ly/2v4YpBS), “Location” is a weighted variable in the Authority Node election process. It is expected that Authority Nodes have different geographic locations and data centers. The Guides welcome UI enhancements to this system in the future for easier automation into the protocol. The following is the proposed handling of this process.

**Scoring**

Three variables will be taken into account with a max of 10 possible points.

1. Country - If your server is listed in a unique country, you score one point.
2. If your server is listed in a unique city, you score three points.
3. If your server is listed with a unique datacenter/provider, you score six points.

**Process**

The following will be the process by which potential Authority Set Operators can choose their location.

1. An announcement will be made X hours before a Google Sheet link will be posted in Discord.
2. Once posted, the Google sheet will allow potential Operators to fill in their entity name, discord username, choice of County / City / Data Center.
3. The first 24 hours any entity can make their choices. If there is overlap in choices, work it out civilly. At the 24 hour mark, no more unique submission will be allowed for another 24 hours. This is an additional 24 hours to workout overlap with other entities. After the 48 hours any overlap will lose out on points. After 48 hours the sheet will be reopened for new submissions but they may not choose any existing locations without penalty to themselves but not the existing entities.
4. Once the initial Authority Set is chosen, existing choices will remain and any new submissions will be accepted on a first come, first serve basis where existing entities will not be further penalized for overlap.

**PROPOSED BY MATT**

\*Simplify this entire process by saying that in order to be eligible to join the Authority Set, you cannot currently be running within ‘x’ miles of a current Authority Set server. This promotes global distribution. Then remove “location” as a weighting criteria. Conclusion: We can accomplish distributed location without needing to make it part of the scoring process. Let’s keep things as simple as possible!

Brian’s response: The world of computer datacenters is even more complex than County / City / Data Center as it currently stands. Different availability zones are effectively different datacenters. Abstracting things away to number of miles ignores the ability of infrastructure engineers to make more nuanced tradeoffs. For example, where Factom currently has Federated Servers in AWS eu-west-1 (ireland) there are 3 different availability zones.

\*Once people join Testnet, they can be provided a list if current server locations and then select a new location accordingly

\*Additionally, Paul Snow did express concerns about being able to verify location

\*Furthermore, current Auth Set applicants should not lose points simply because someone new came onto the scene and set-up shop in their same location.

That brings up the question about the existing servers, as AWS eu-west-1 is where the current servers are located. Also, their exact location is indeterminate. https://www.theatlantic.com/technology/archive/2016/01/amazon-web-services-data-center/423147/