



IP geolocation is the kind of thing people don't think about—until it goes wrong. In an age of increasingly precise, tailored searches, consumers want relevant results, and when those results appear in the wrong language, or refer to distant resources, everyone loses. Sometimes, the problem is within the search engine itself, but more often this kind of problem arises from inaccurate data regarding the searcher's location.

## Finding Your Searchers

As a content provider, you want to give your consumers accurate, relevant, and reliable results. When someone types a question or keyword, you want them to see the best possible answer. To that end, content providers develop strategies to vet the results for a variety of different factors, some of which depend on the location of the consumer.

## What Goes Wrong?

Since so many companies, and so many consumers, want results that are tailored to specific locations, content providers do their best to capture user locations. They [use geolocation data](#) from a number of sources including:

- proprietary heuristics;
- data mining;
- commercial databases like IP2Location and MaxMind.

This works well until it doesn't, because one or all of these sources may have inaccurate or insufficient information about the actual location of the user. Given how many other elements of

internet infrastructure have been standardized and managed after a period of confusion, this problem requires a better, standardized way of identifying location based on IP geolocation.

## Benefits of an IP Registry

Given that all parties have an interest in geographically accurate information, it would seem that a registry could alleviate problems and provide the much-needed data. This would not be a significant departure from current practices, either. IP address allocations already offer substantial information, like:

- who to contact about your problems;
- what [ASNs](#) support them;
- which organizations they are registered to.

Geolocation could be provided as an additional data point without having to create new systems or tools. Adding this information would not eliminate the need for [existing databases](#) currently in use, but would complement that data, potentially improving accuracy.

## What About Privacy?

The most obvious challenge for an IP geolocation registry would be the sensitivity of location information. While generalized location information may not be particularly sensitive (location within a state or county, for instance), precise information could be a much more volatile issue, principally with regard to security. Some concerns could be reduced by assigning responsibility for this data to ISPs instead of a large database like WHOIS. This would have the additional benefit of increasing the accuracy of the information, by making its [collection part](#) of a more localized

process.

## Risks Versus Rewards

Clearly, there are substantial [benefits that result from accurate, precise location information](#). [Businesses are better able to serve clients, consumers can identify locally accessible goods and service more easily](#), and the possibility of location mistakes can be reduced.

The biggest challenge to the development of an IP geolocation registry – privacy concerns – remains an important issue to address. Given the many positive benefits of accurate mapping, and the desire of both consumers and producers to [improve the quality](#) of content provided, it seems like a worthwhile challenge to undertake.