

# Refraction networking

**Refraction networking**, also known as **decoy routing**, is a research [anti-censorship](#) approach that would allow users to circumvent a censor without using any individual [proxy servers](#).<sup>[1]</sup> Instead, it implements proxy functionality at the core of partner networks, such as those of [Internet service providers](#), outside the censored country. These networks would discreetly provide censorship circumvention for "any connection that passes through their networks."<sup>[2]</sup> This prevents censors from selectively blocking proxy servers and makes censorship more expensive, in a strategy similar to [collateral freedom](#).<sup>[3][4][5]</sup>

The approach was independently invented by teams at the [University of Michigan](#), the [University of Illinois](#), and [Raytheon BBN Technologies](#). There are five existing protocols: [Telex](#),<sup>[6]</sup> [TapDance](#),<sup>[7]</sup> [Cirripede](#),<sup>[8]</sup> [Curveball](#),<sup>[9]</sup> and [Rebound](#).<sup>[10]</sup> These teams are now working together to develop and deploy refraction networking with support from the [U.S. Department of State](#).<sup>[1][3]</sup>

## See also

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- [Domain fronting](#)

## References

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## External links

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- Official website (<https://refraction.network/>)



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