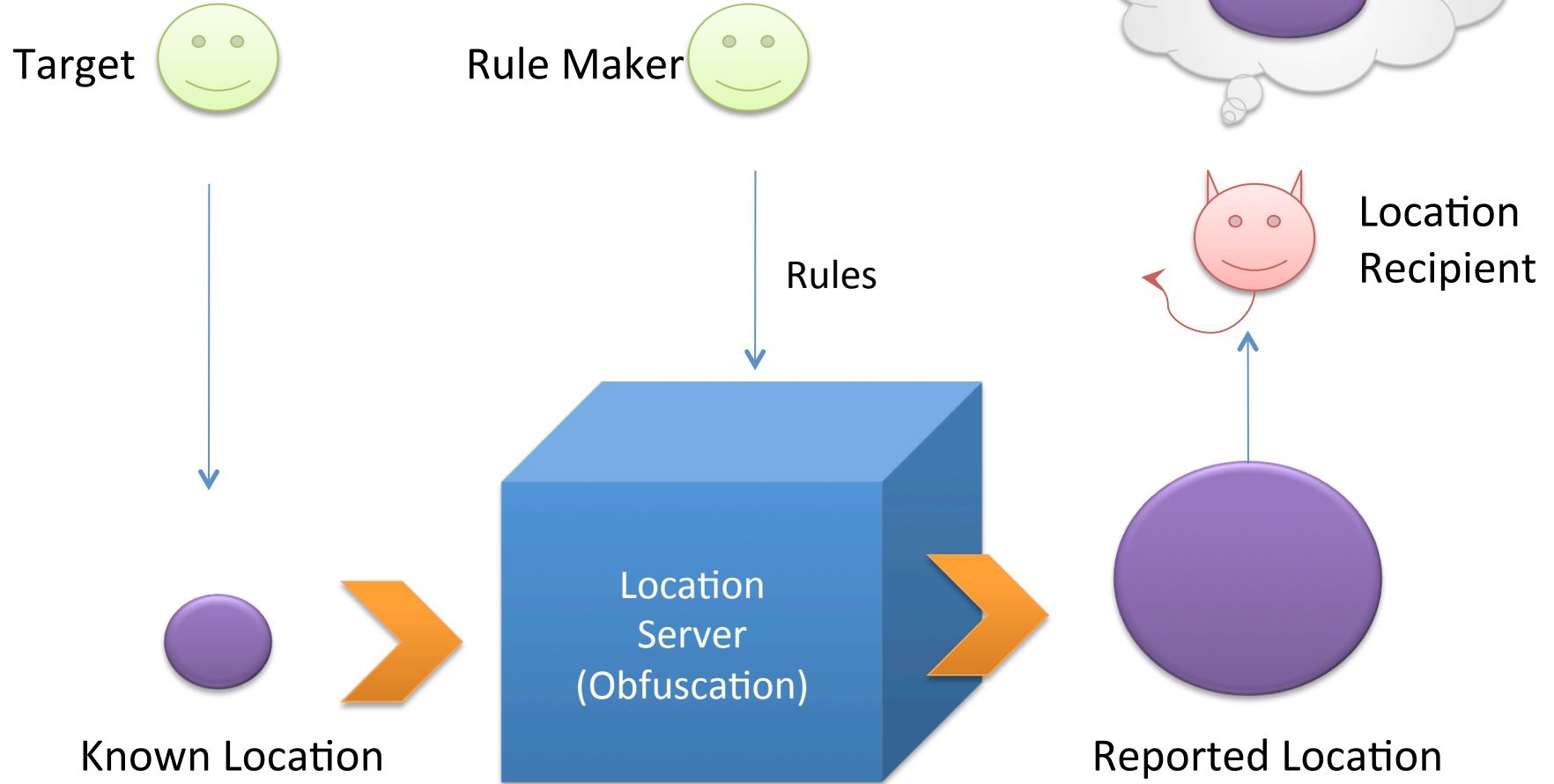


Obscuring

[draft-ietf-geopriv-policy](#)

Model



Assumptions

- Given a reported location **A**,
- ...and assuming **X**,
- ...then the recovered location is **B**

- If $\text{uncertainty}(\mathbf{B}) < \text{uncertainty}(\mathbf{A})$,
- ...then the assumption was productive.

- Apply multiple assumptions for big gains.

Example Assumptions

- The target is on Earth
- The target is on the ground
- The target has constrained speed/acceleration
- The target is walking
- The target is on a boat
- The target cannot fly
- The target cannot breathe under water
- The target likes ice cream
- The target plays Theremin
- The target wears red-and-white striped shirt, bobble hat, and glasses

Assume Nothing

- An obscuring algorithm might reveal something when the location recipient makes no assumptions
- A good algorithm doesn't reveal much unless the location recipient makes an assumption

Algorithm Assessment

- The effectiveness of an algorithm is assessed against a set of assumptions.
- The information that is recovered when the assumption is correct determines how effective the algorithm is.
- Recovery depends on the reliability of the assumption
- ...but the assessment must assume that the assumption is correct.