OAuth WRAP Overview

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Name History

- Simple OAuth
- Simple Auth
- WRAP
  (Web Resource Authorization Protocol)
- OAuth WRAP

Authors

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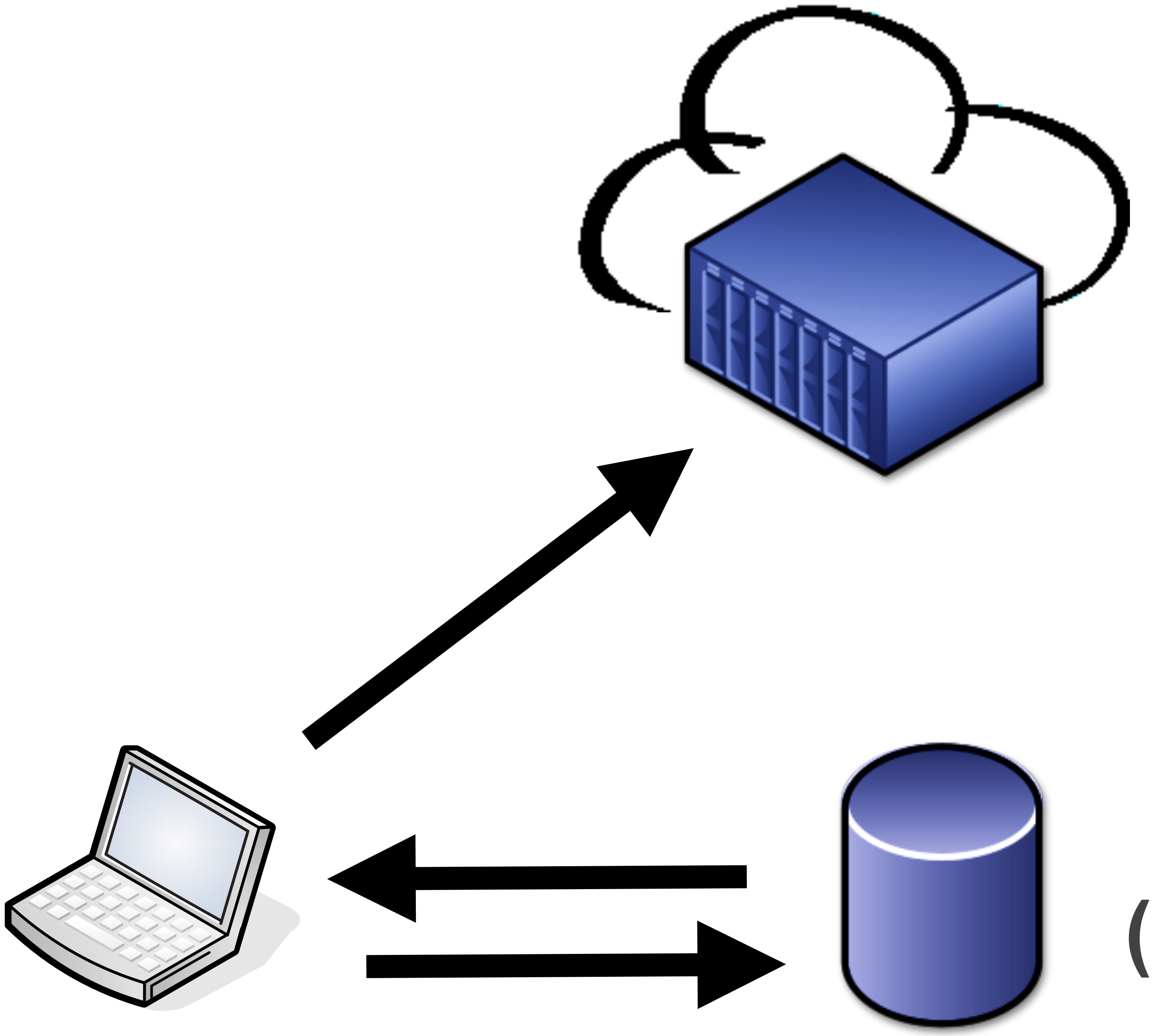
OAuth 1.0A Issues

- Client implementation pain (crypto)
- Single profile (web app and rich app)
- Tight coupling between AS & PR
  - Enterprise use cases
  - Scale in large deployments

Use Cases

- User Delegation
  - Web App
  - Rich App (PC, phone, device)
- Authorization Delegation
  - Cloud Computing

Cloud Use Case



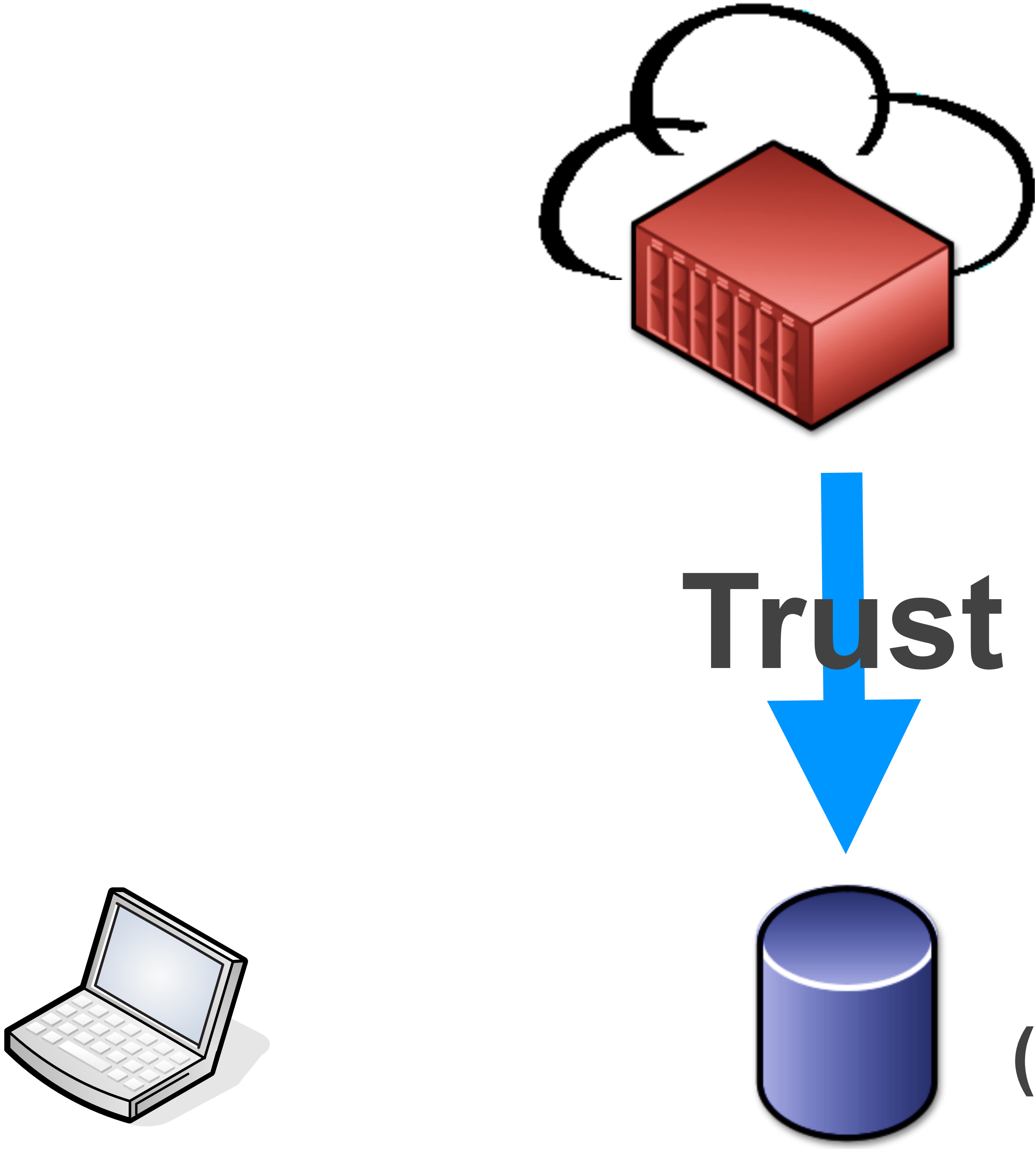
PR

(Protected Resource)

AS

(Authorization Server)

Client



PR

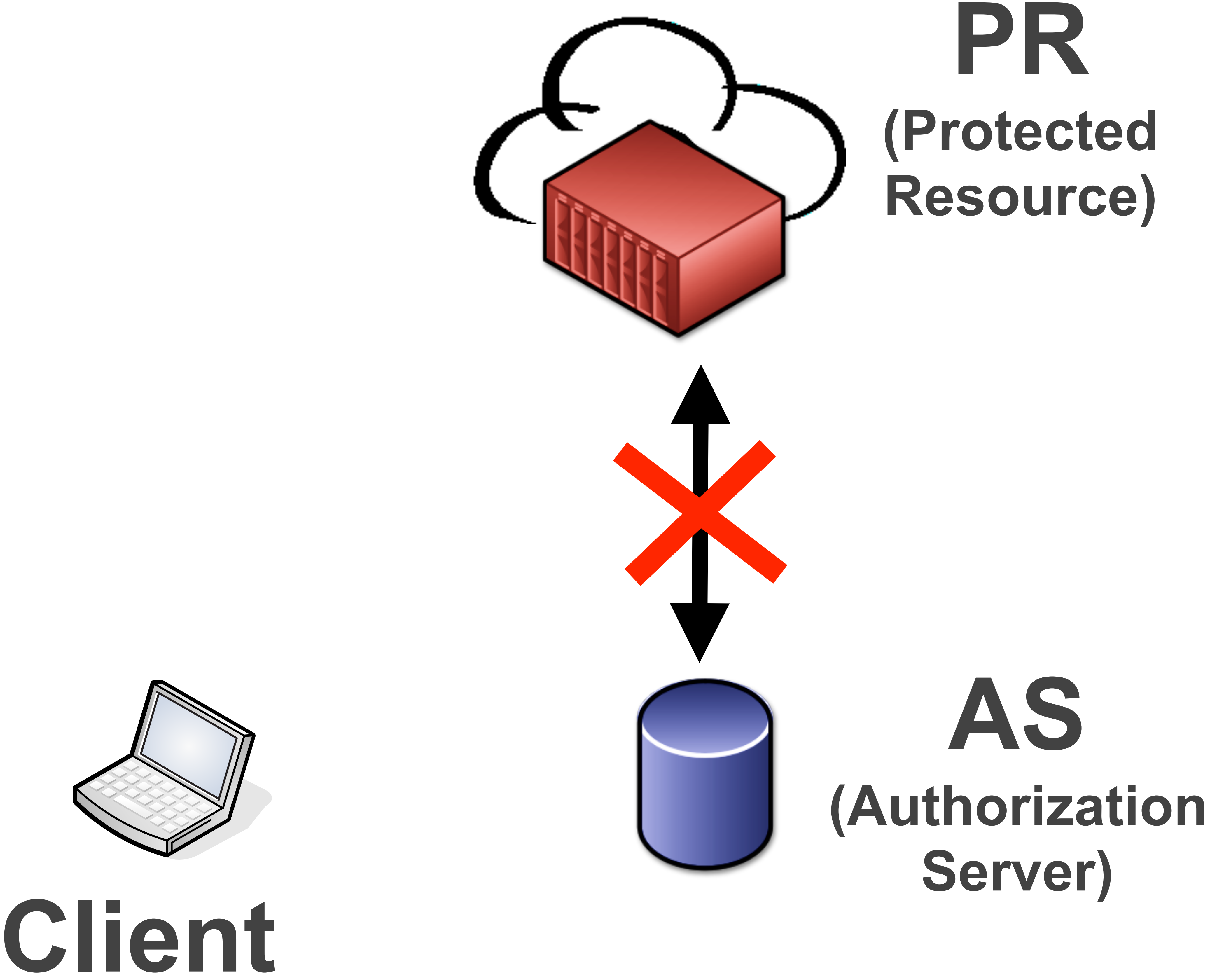
(Protected Resource)

Trust

AS

(Authorization Server)

Client



PR

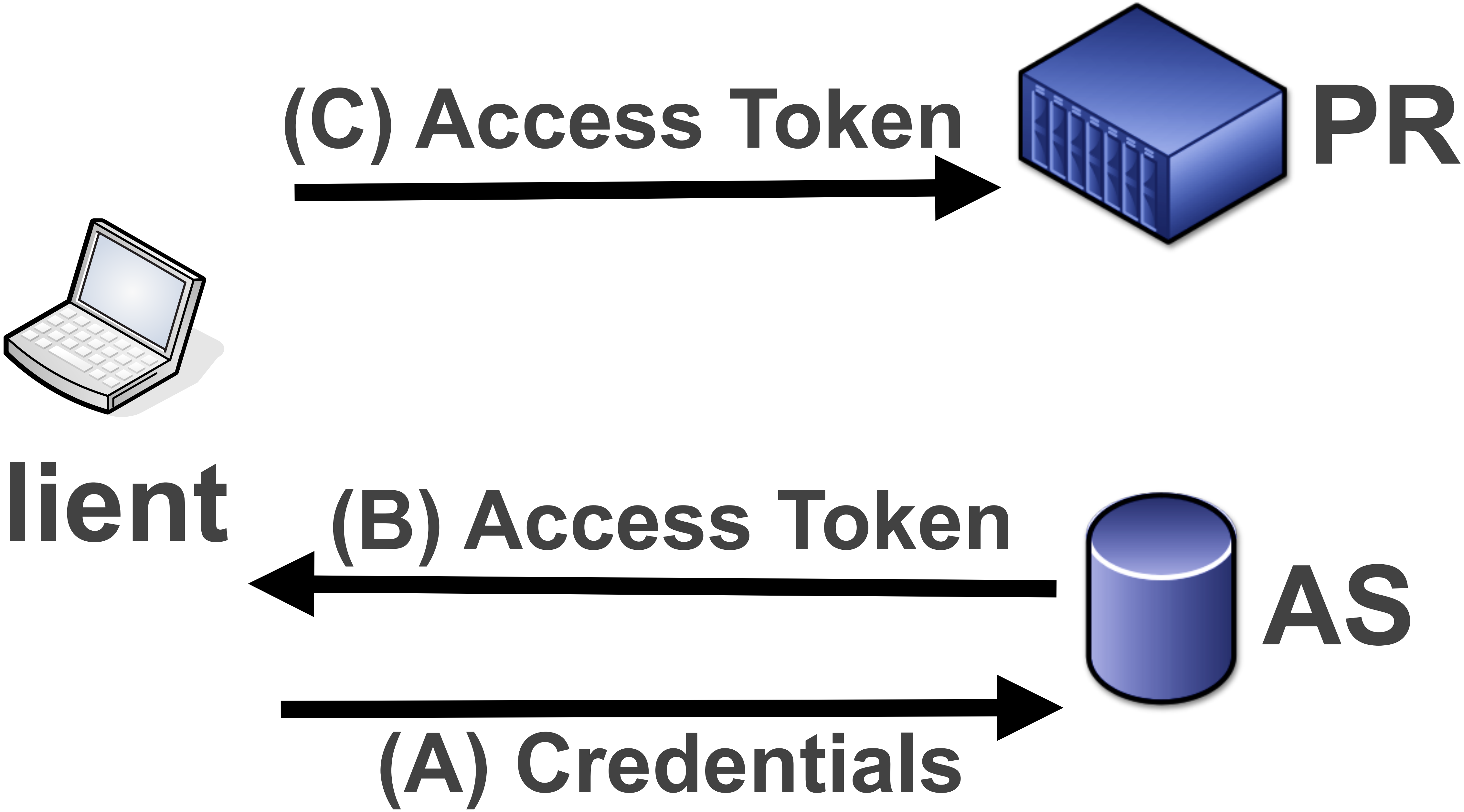
(Protected Resource)

AS

(Authorization Server)

Client

Accessing a PR



(C) Access Token

PR

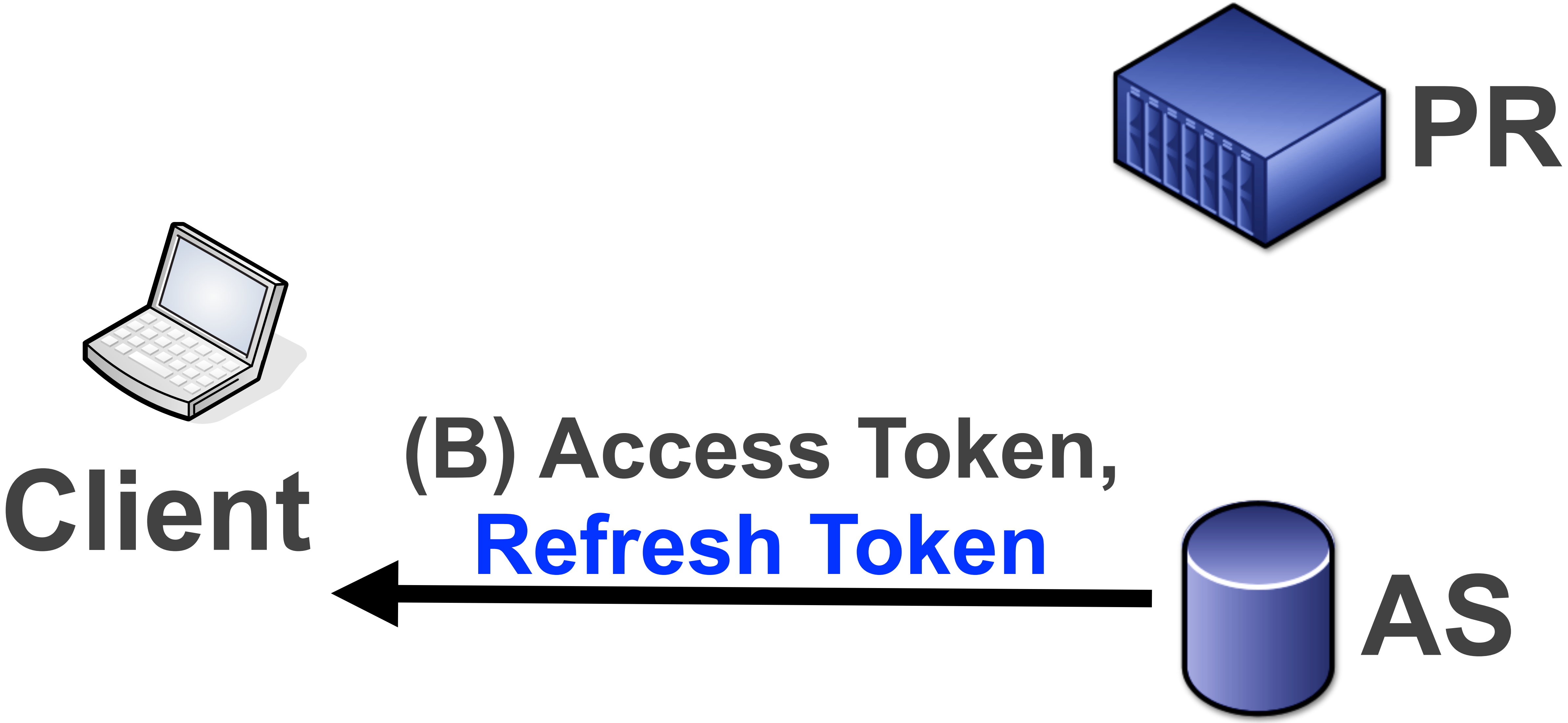
Client

(B) Access Token

AS

(A) Credentials

Obtaining Refresh Token



PR

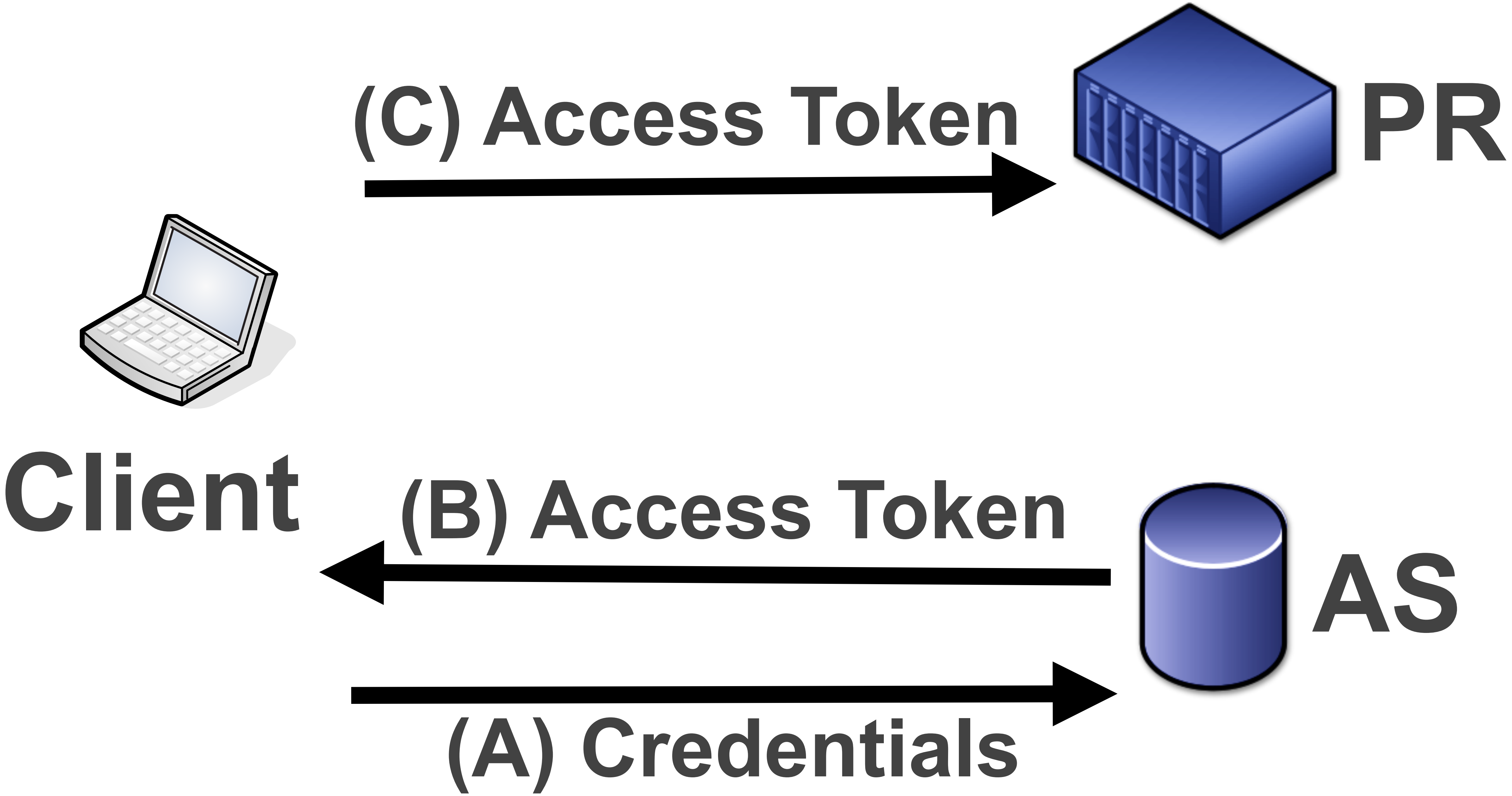
Client

(B) Access Token,

Refresh Token

AS

Refreshing Access Token



(C) Access Token

PR

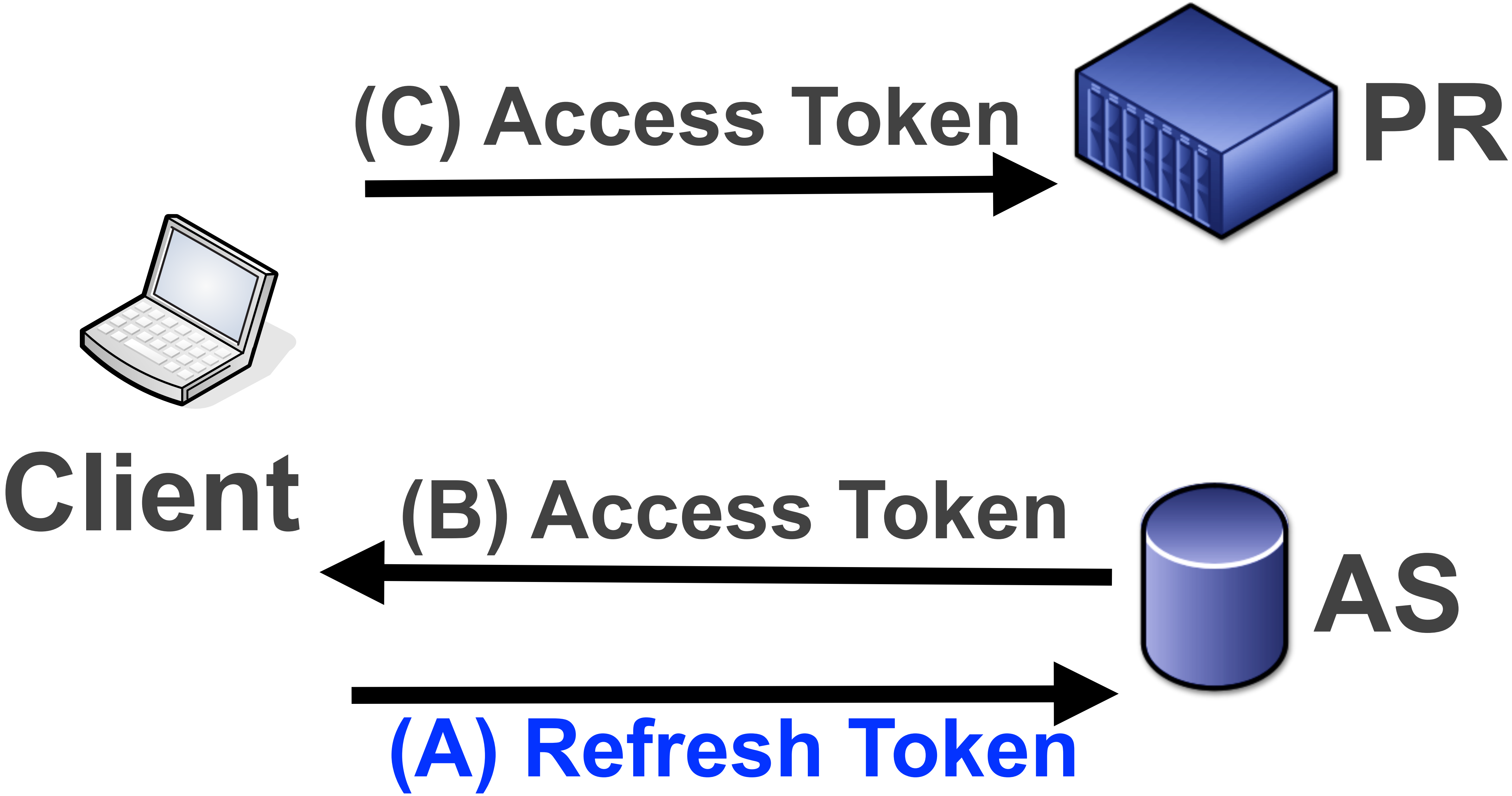
Client

(B) Access Token

AS

(A) Credentials

Refreshing Access Token



(C) Access Token

PR

Client

(B) Access Token

AS

(A) Refresh Token

Terminology

- Client
  (Web App, Rich App, Mobile App, Device...)
- Protected Resource
- Authorization Server
- User
- Access Token (short lived bearer token)
- Refresh Token (long lived bearer token)

Access Token

- Out of scope for OAuth WRAP
- Likely contains:
  - Authorization / scope(s) / permission(s) / role(s) / identifier(s)
  - Expiration
  - AS Signature

Refresh Token

- Out of scope for OAuth WRAP
- Issued and consumed by AS
- Contains information needed to issue a new Access Token

WRAP Capabilities

- Claims oriented model
- Separation of AS and PR
- Delegated Access for users
- Delegated Authorization for PR
- Single PR entry point

Potential Future

- JSON results from AS
- method parameter in AS calls
- additional profiles
- optional, standard JSON Access Token
- client signing / creation of Access Token (OAuth 1.0 like functionality)