TrustBase: Certificate-Based Authentication

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Problem

Use this slide to introduce major sections

Remember to remove this tip before presenting!

- Application developers improperly validate website certificates
- Untrustworthy or coerced Certificate Authorities
- Deployment of alternatives is hard

TrustBase

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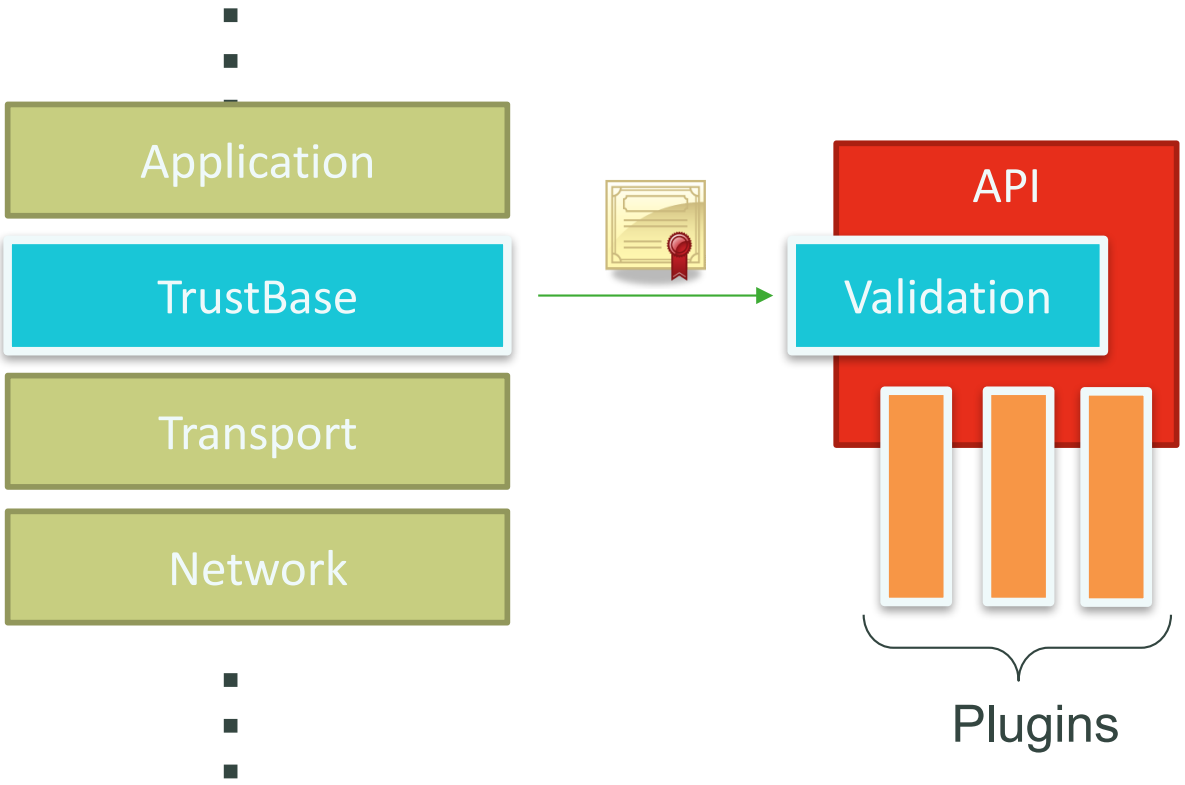
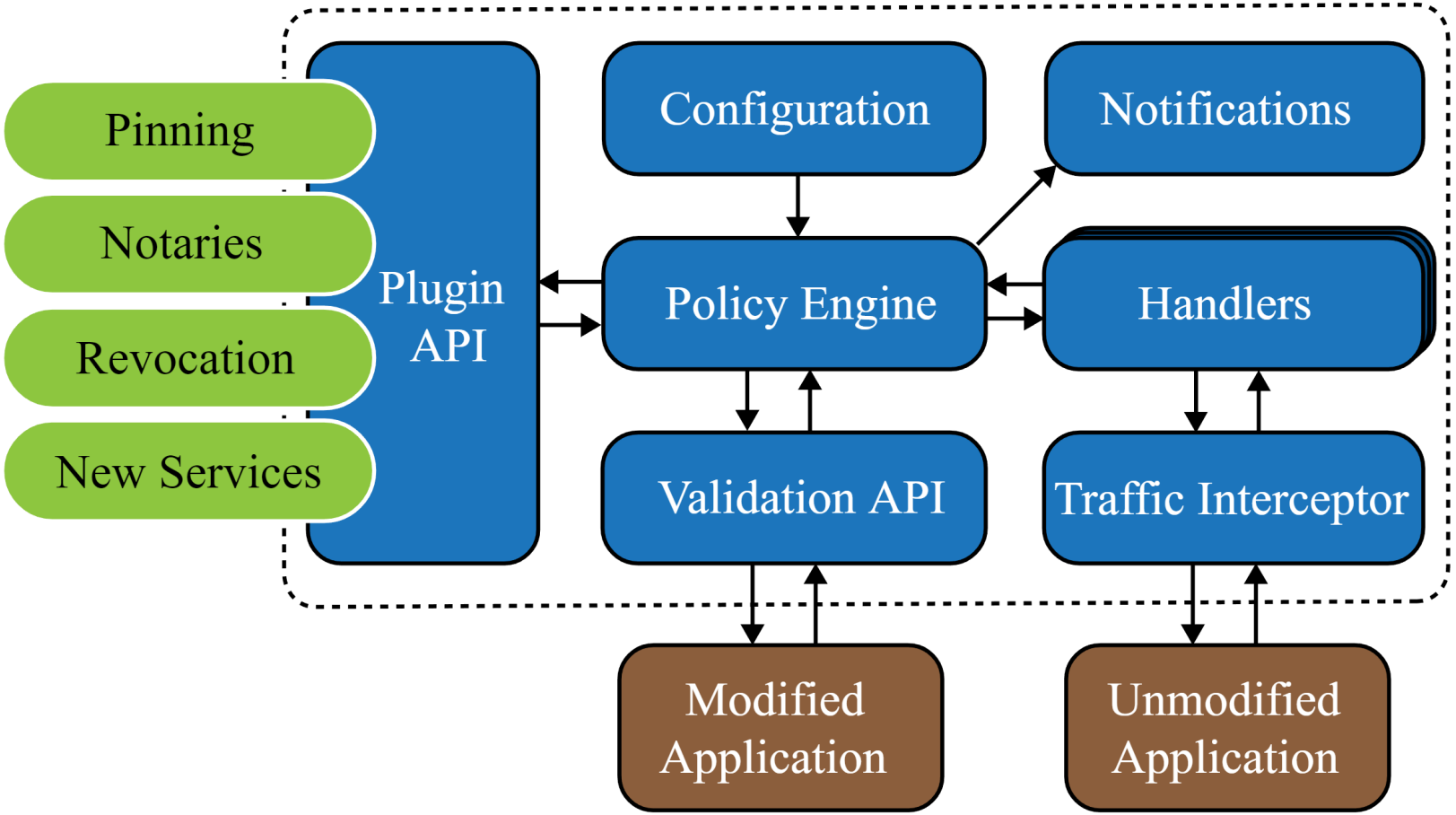
- Motivating principles
  - Centralize authentication as an OS service
  - Empower system admins to dictate how trust decisions are made on their own machines
- Design goals
  - Secure *all* existing applications
  - Prohibit unprivileged applications from acting against administrator rules
  - Provide easy deployment of authentication systems
  - Negligible overhead



Prototypes for

- Linux
- Android (nonrooted)
- Windows


Pinning
Notaries
Revocation
New Services
Plugin API
Configuration
Notifications
Policy Engine
Handlers
Validation API
Traffic Interceptor
Modified Application
Unmodified Application

Feedback

- How best to deploy this technology in the enterprise
- Pilot deployments to gather production data in passive mode

Further Information: https://owntrust.org/

TrustBase

Source code available on github

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