



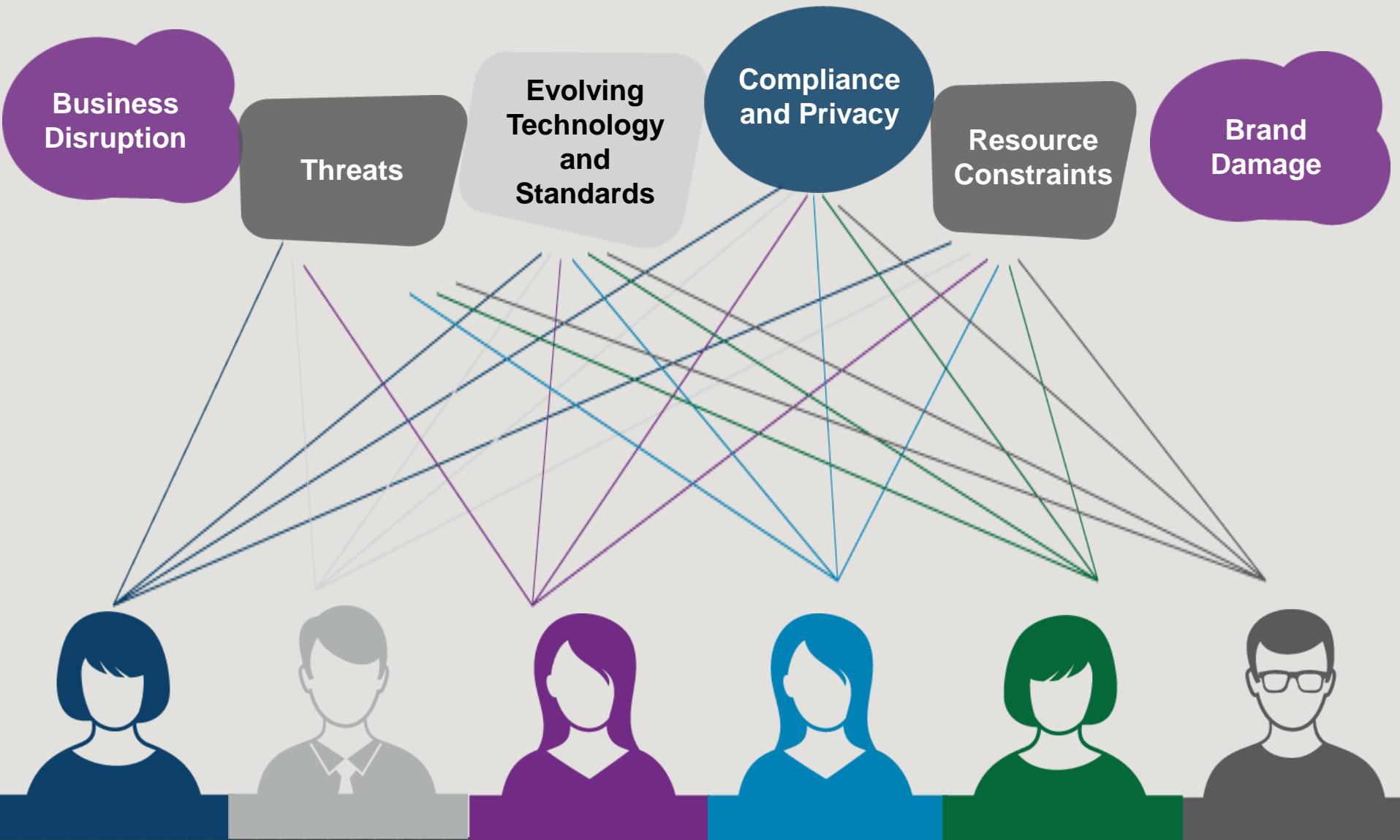
Achieving Security Beyond the Certificate



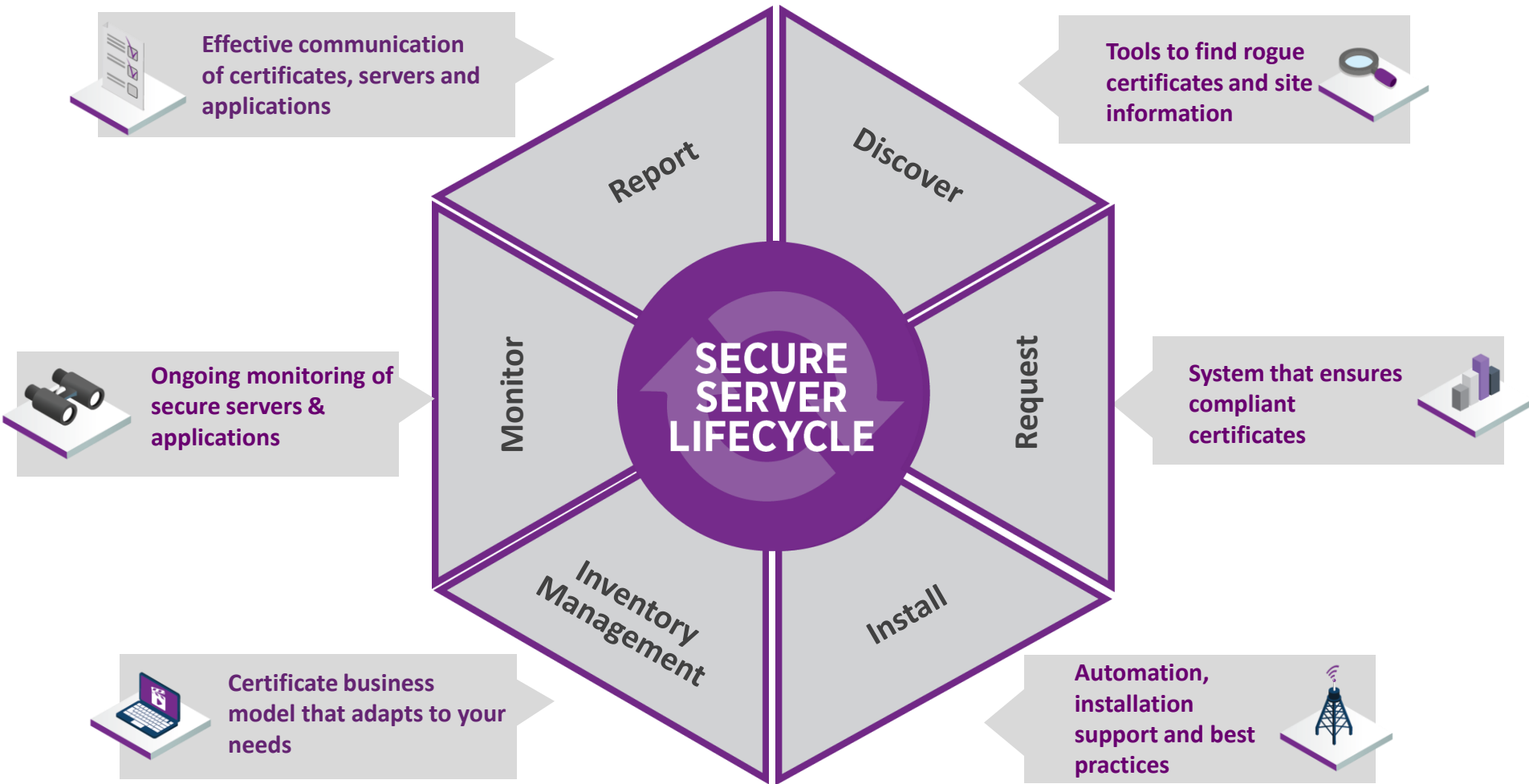
TRUSTED IDENTITIES | SECURE TRANSACTIONS

InfoCom Athens - April 2018

YOUR HIGH LEVEL CONCERNS



HOW THE ECS SOLUTIONS HELPS



ENTRUST DATACARD

ENTRUST CERTIFICATE SERVICES

SIMPLIFY CERTIFICATE
MANAGEMENT

SECURITY BEYOND THE CERTIFICATE

SECURITY BEYOND THE CERTIFICATE

Requests

Native Certs

Management

Foreign Certs

Discover

USERS

Requester

Administrator

eForm

CONNECTORS

API

Venafi

ServiceNow

AUTO-INSTALL

Turbo
(IIS)

ACME
(Apache)

EV SSL

OV SSL

WC SSL

Private SSL

Internal
SSL

White-Label
SSL

Code
Sign

Document
Sign

Secure
Email

Mobile
Device

Certificates & Web Sites

Lifecycle
Management

*Issue, Re-Issue, Revoke,
Renew, Duplicate*

End-Point
Management

*Auto-install, End-point
scoring, Locations,
Path Validation*

Issuance

Policy
Engine

*Implement industry
policy, manage
custom policy*

Manage
Switch

Reports

*Report, Notifications
Dashboard, Alerts
Charts, Emails*

Monitor
& Alerts

*Policy, Best Practice,
Low Server Grades,
Malware scanning*

Competitive
Certificates

ECS
Certificates

Entrust PKI
Certificates

Microsoft
Certificates

Self-Signed
Certificates

Other
Certificates

Discovery Agent

Deploy scanner to find
Certificates & location

Manual Import

Import un-scannable
certificates

SSL Server Test

Assess & track end-
point configuration

CT Import

Import certificates from
CT Logs

Sitelock

Assess end-points for
Malware & Reputation

CAPI Scanner

Scan MS CAPI Store for
Certificates

24/7
Support

Best Practice
Advisory

Rapid
Verification

Dedicated
Sales Rep

Global Browser
Support

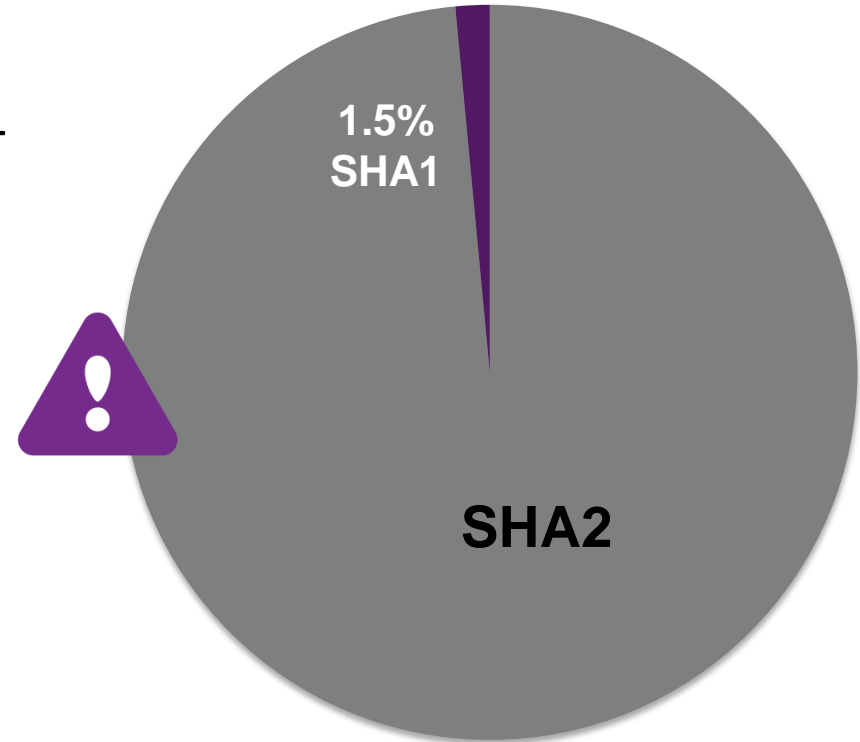
Flexible
Licensing

Revocation
Services

Security
Reputation

ISSUE: SHA-1 DEPRECATION

- SHA-1 vulnerable to collision attack
- CAs do not issue public trust SHA-1 certificates
- Browsers and O/S removing trust from SHA-1 signed certificates
- Web sites need to move to SHA-2 to provide trust to end users



Source: SSL Pulse Jan 2, 2017

SOLUTION: SHA-1 DEPRECATION

Policy engine controls SHA-1 access...

Private SSL Certificate offers solution option ...

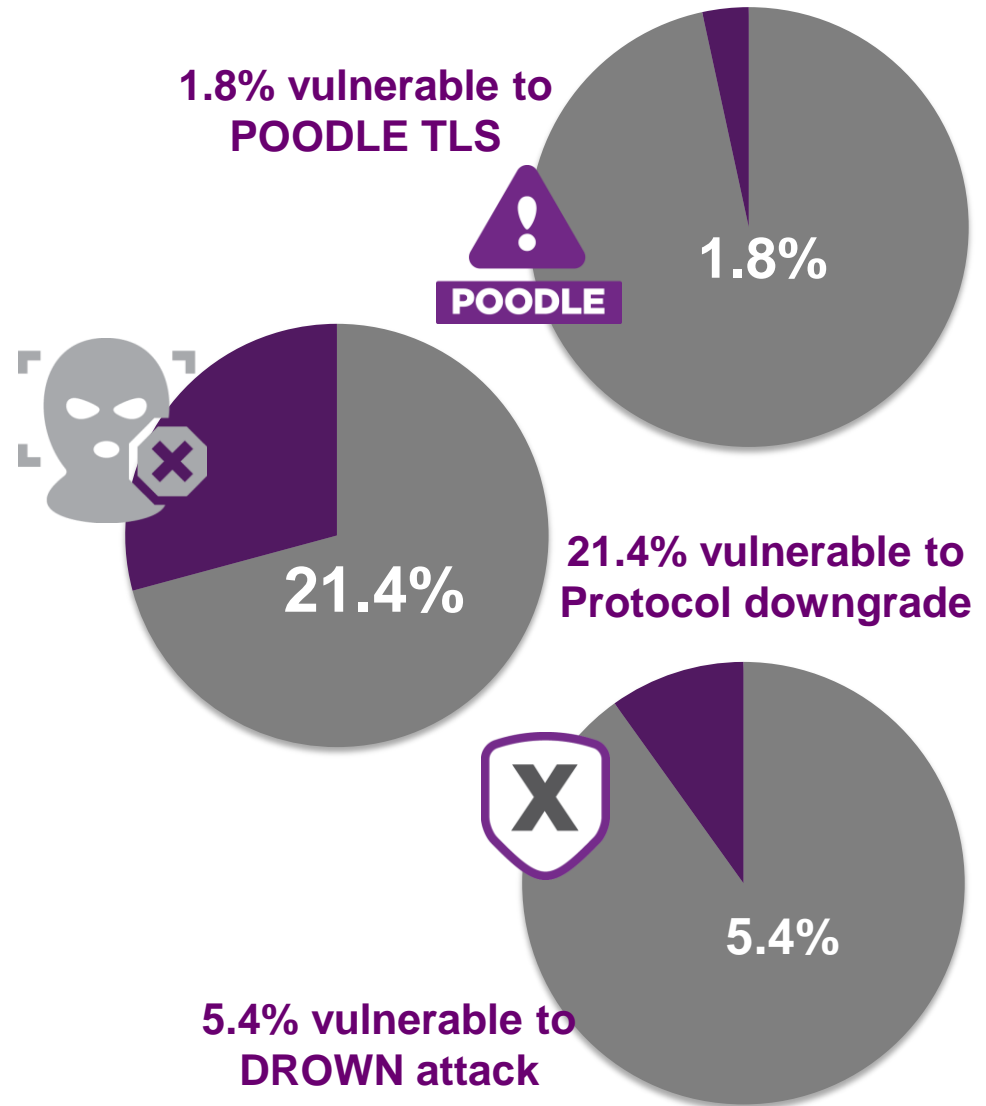
Discovery & CT Search find all SHA-1 Certificates...

Custom fields enable tracking business owner & other information ...

Flexible Licensing eases replacement of certificates...

ISSUE: CURRENT VULNERABILITIES

- Secured Sites may be susceptible to known & new vulnerabilities
- Vulnerabilities may compromise server data, user data and user privacy
- Administrators may be blind to scope of exposure



Source: SSL Pulse Jan 2, 2017

SOLUTION: CURRENT VULNERABILITIES

Policy engine controls requests to ensure compliant certificates

SSL Server Test can expose known vulnerabilities...

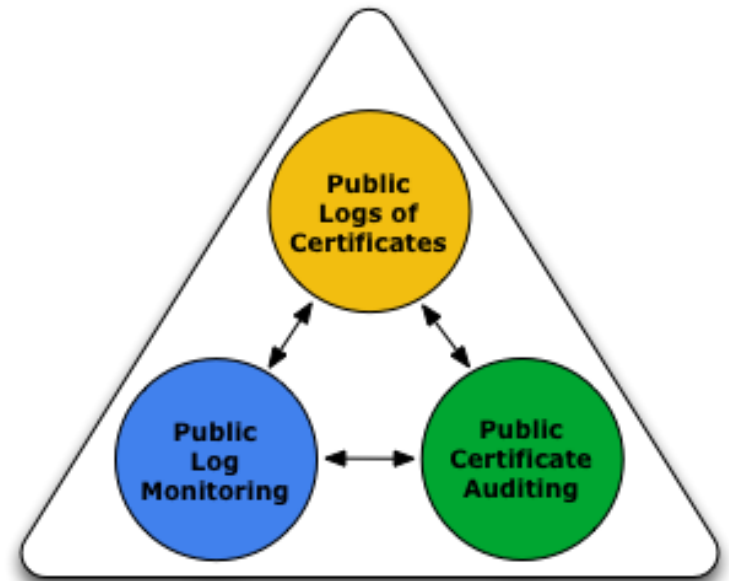
Automated SSL Server Test provides ongoing monitoring of endpoints with alerts...

Reporting/Dashboarding can scope exposure...

Best Practice Advisory & Bulletproof SSL will provide information to mitigate threats...

ISSUE: CT & PRIVACY

- Certificates are posted to CT logs
- Trust with Chrome requires all new certificates logged starting October 2017
- Logs can be monitored to find fraudulent certificates
- However, privacy is an issue as logs are public



SOLUTION: CT & PRIVACY

CT Search and CT Import will help you complete your certificate inventory

CT Monitoring will alert you to potential rogue certificates...

Entrust SSL Certificate Portfolio can still provide privacy...

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ISSUE: COMPLIANCE & RISK

- Everyone is subject to some form of external security compliance
- Many subjected to internal compliance
- Compliance difficult without complete inventory
- If you don't have an inventory you are blind to risk



SOLUTION: COMPLIANCE & RISK

Policy engine default provides baseline compliance...

Policy engine can be configured for corporate compliance...

Discovery and CT Import help find non-Entrust certificates to complete inventory and evaluate against policy...

SSL Server Test will assess end-point configuration against policy

Reporting can help evaluate certificate and end-point population against policy...

ISSUE: CAA & WHO IS ISSUING YOUR CERTS

- By default, all CA's are able to issue Certificates for your domains
- Therefore, you can be attacked through any CA
- You should attempt to limit this exposure by leveraging CAA to **prevent mis-issuance** by specifying and limiting authorized CA's and issuance scope



SOLUTION: CAA & WHO IS ISSUING YOUR CERTS

Policy Engine checks CAA record to see if we are allowed to issue...

Discovery and **CT Import** will augment your inventory to highlight other issuing CA's...

Consolidated certificate portal makes it easier to switch from non-compliant CA's...

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ISSUE: DV & FALSE SECURITY

- Very Cheap or Free
- Fast issuance
- Automated Validation



amazon trust services

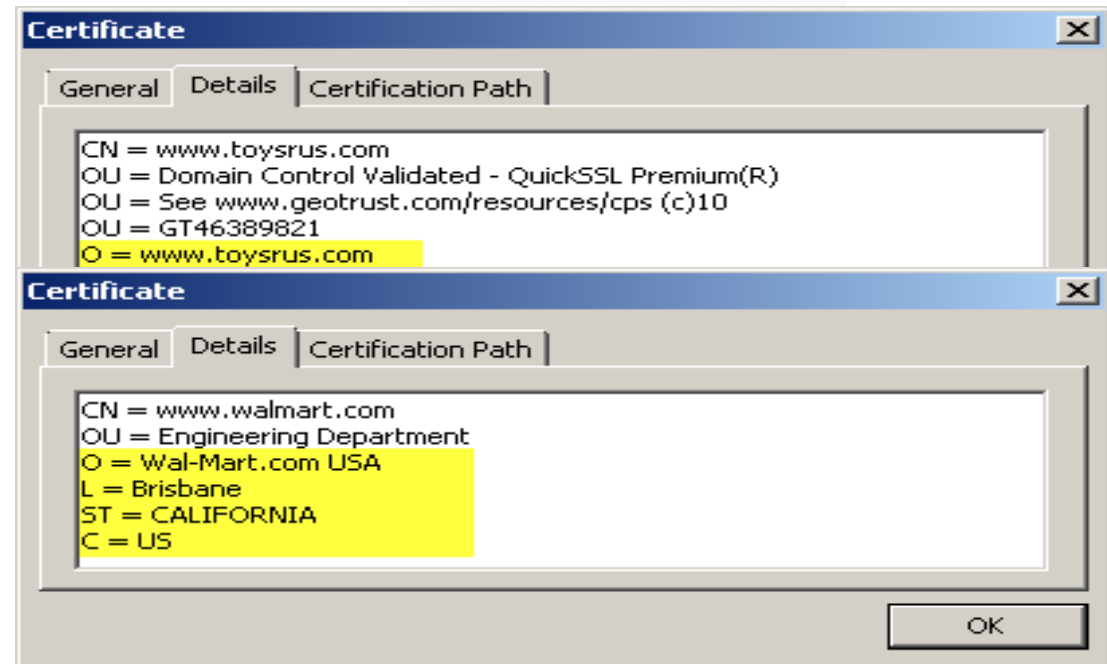
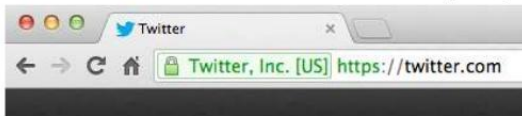
cPanel DV SSL Certificate



DOMAIN VALIDATED (DV) ORGANIZATION VALIDATED (OV)



EXTENDED VALIDATION (EV)



HTTP + S → S for free, DV has no authentication!
You do not know the identity behind the Webpage

SOLUTION: DV & FALSE SECURITY

Security Posture examine security history... have they ever been compromised?

Business Focus Do certificates constitute a substantial part of their business?

Services Offered CRL/OCSP availability & performance, OV and EV certificates...

Certificate Management Option Do they offer a Enterprise level certificate management platform and services?

Support contactable and local? Partners in local area?

SECURITY BEYOND THE CERTIFICATE!

TRUSTED BRAND

Security focused
Valued by industry standards groups
Respected client base
Strong reputation for innovation

ROBUST OFFERINGS

*Most Versatile Digital Certificates Portfolio**

Full range of SSL certificates
Signing and user certificates
Private SSL & mobile device certificates
Integrated Certificate Discovery

SERVICE EXCELLENCE

*Best CTaaS**
*Best Customer Service**
*Best Innovation**
Top website performance
“Best Practices” approach
Global browser & server compatibility

EASY TO DO BUSINESS WITH

Dedicated sales rep
Cost saving reusable license plan
Flexible policies
Integrated suite of products
Annual account review

PEACE OF MIND

Trusted Identities | Secure Transactions™

**2016 Frost & Sullivan Award Winners*

Thank You!

