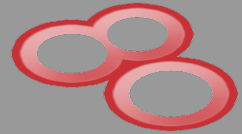
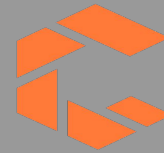




# Search Engines



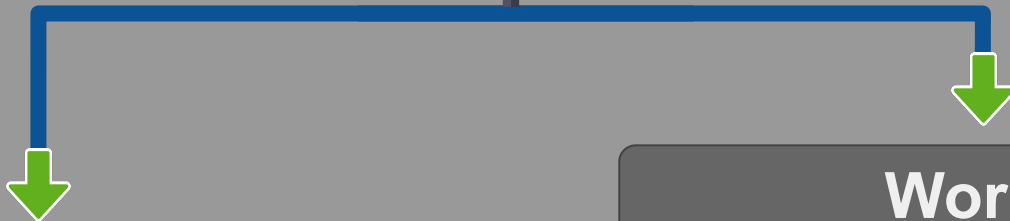
**Mahmoud M. Awali**

 **@0xAwali**



**attacker**

Cyberspace Engines Workflow



**Functionalities**

**Words**



**Dashboards**



attacker

My Methodology

Use These **Words** While Searching About  
**D a s h b o a r d s**

dashboard

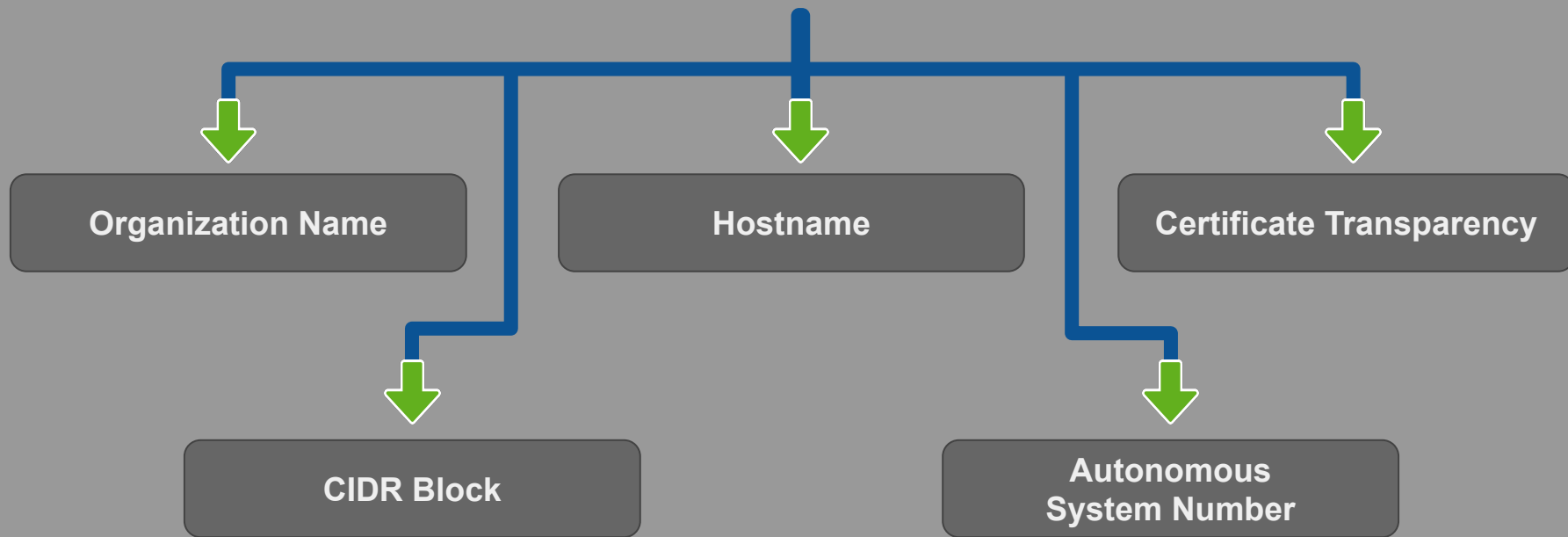
"control panel"

admin



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## Dashboards Workflow





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My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **D a s h b o a r d s**



```
ssl.cert.subject.cn:"company.com" http.title:"dashboard"
```



```
ssl:"company.com" http.title:"dashboard"
```



```
cert="company.com" && title="dashboard"
```



```
cert.subject="company" && title="dashboard"
```



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **D a s h b o a r d s**



`ssl.cert.subject.cn:"company.com" dashboard`



`ssl:"company.com" dashboard`



`cert="company.com" && body="dashboard"`



`cert.subject="company" && body="dashboard"`



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My Methodology

# Use Zoomeye AND Censys Engines To Discover Dashboards



ssl:company.com +title:"dashboard"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.title:dashboard



attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover Dashboards



ssl:company.com +dashboard



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.body:dashboard





attacker

My Methodology

# Use **Cyberspace** Engines To Discover **D a s h b o a r d s**



asn:ASN Number e.g. AS19551+http.title:"dashboard"



asn="Number e.g. 19551" && title="dashboard"



asn:Number e.g. 19551 +title:"dashboard"



 **IPv4**

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.title:dashboard



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My Methodology

# Use **Cyberspace** Engines To Discover **D a s h b o a r d s**



asn:ASN Number e.g. AS19551+dashboard



asn="Number e.g. 19551" && body="dashboard"



asn:Number e.g. 19551 +dashboard



 **IPv4**

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.body:dashboard



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Dashboards



hostname:company.com http.title:dashboard



domain="company.com" && title="dashboard"



hostname:company.com +title:"dashboard"



Websites

company.com AND 443.https.get.title:dashboard



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My Methodology

# Use **Cyberspace** Engines To Discover Dashboards



hostname:company.com dashboard



domain="company.com" && body="dashboard"



hostname:company.com +dashboard



Websites

company.com AND 443.https.get.body:dashboard



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My Methodology

# Find Dashboard Pages With

# Google



site:\*.company.com intitle:"dashboard"

Google Search

I'm Feeling Lucky



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **D a s h b o a r d s**



net:"I.P.v.4/CIDR" http.title:dashboard



ip="I.P.v.4/CIDR" && title="dashboard"



cidr:I.P.v.4/CIDR +title:"dashboard"



IPv4

I.P.v.4/CIDR AND 443.https.get.title:dashboard



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **D a s h b o a r d s**



net:"I.P.v.4/CIDR" dashboard



ip="I.P.v.4/CIDR" && body="dashboard"



cidr:I.P.v.4/CIDR +dashboard



IPv4

I.P.v.4/CIDR AND 443.https.get.body:dashboard



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **D a s h b o a r d s**



org:"Company Inc" http.title:dashboard



org="Company Name Inc." && title="dashboard"



organization:"Company" +title:"dashboard"



443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.title:dashboard





attacker

My Methodology

# Use **Cyberspace** Engines To Discover **D a s h b o a r d s**



org:"Company Inc" dashboard



org="Company Name Inc." && body="dashboard"



organization:"Company" +dashboard



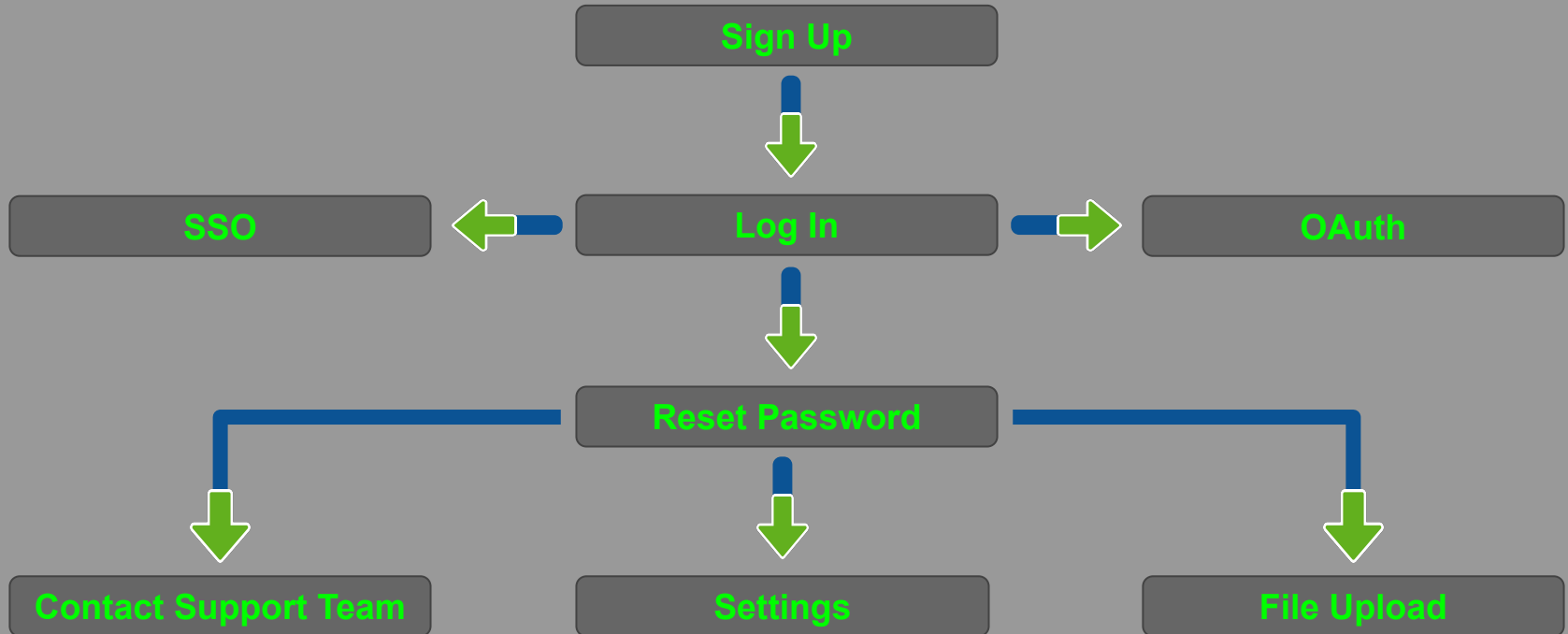
 **IPv4**

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.body:dashboard



**attacker**

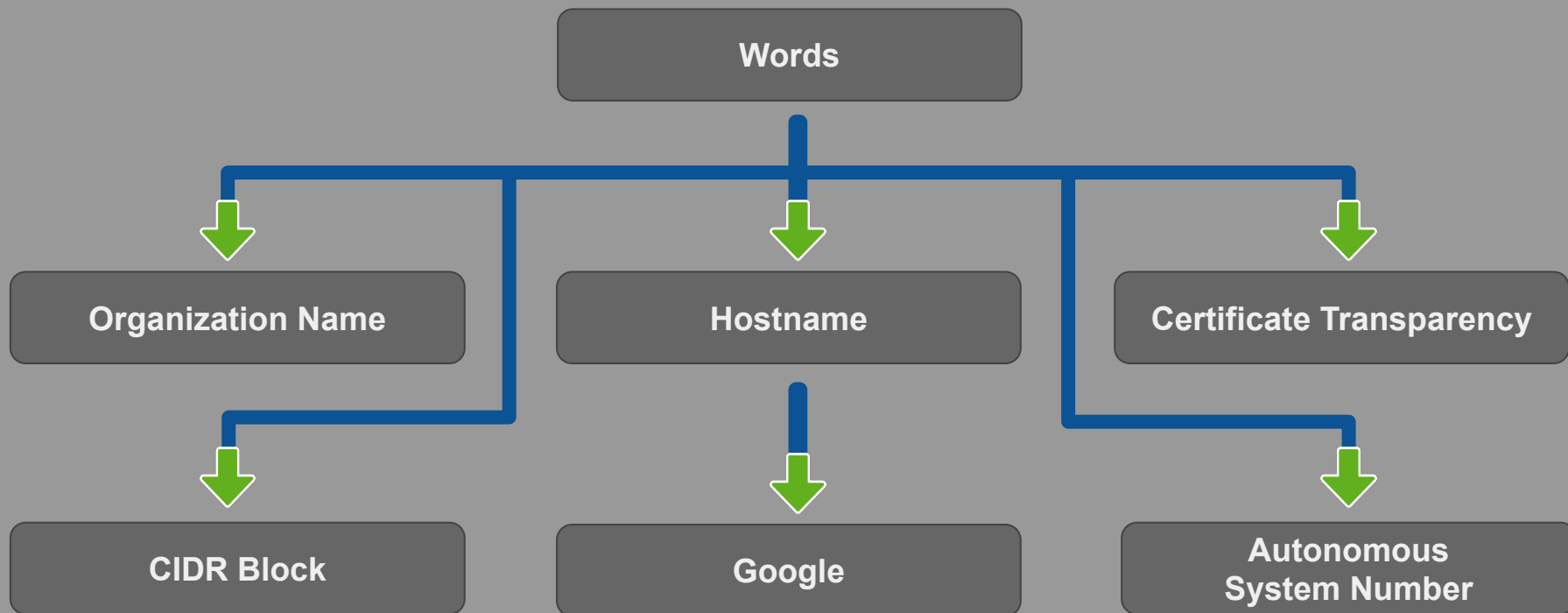
## Functionalities Workflow





**attacker**

Sign Up Workflow





**attacker**

My Methodology

# Use These **Words** While Searching About **Sign Up Pages**

**"sign up"**

**"new account"**

**registration**



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **Sign Up Pages**



`ssl.cert.subject.cn:"company.com" http.title:"sign up"`



`ssl:"company.com" http.title:"sign up"`



`cert="company.com" && title="sign up"`



`cert.subject="company" && title="sign up"`



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **Sign Up Pages**



`ssl.cert.subject.cn:"company.com" "sign up"`



`ssl:"company.com" "sign up"`



`cert="company.com" && body="sign up"`



`cert.subject="company" && body"sign up"`



attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover Sign Up Pages



ssl:company.com +title:"sign up"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.title:"sign up"



attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover Sign Up Pages



ssl:company.com +"sign up"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.body:"sign up"





attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Sign Up Pages**



asn:ASN Number e.g. AS19551+http.title:"sign up"



asn="Number e.g. 19551" && title="sign up"



asn:Number e.g. 19551 +title:"sign up"



 **IPv4**

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.title:"sign up"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Sign Up Pages**



asn:ASN Number e.g. AS19551+"sign up"



asn="Number e.g. 19551" && body="sign up"



asn:Number e.g. 19551 +"sign up"



 **IPv4**

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.body:"sign up"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Sign Up Pages**



hostname:company.com http.title:"sign up"



domain="company.com" && title="sign up"



hostname:company.com +title:"sign up"



Websites

company.com AND 443.https.get.title:"sign up"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Sign Up Pages**



hostname:company.com "sign up"



domain="company.com" && body="sign up"



hostname:company.com +"sign up"



Websites

company.com AND 443.https.get.body:"sign up"



attacker

My Methodology

# Find Sign Up Pages With Google



site:\*.company.com intitle:"sign up"

Google Search

I'm Feeling Lucky



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Sign Up Pages**



net:"I.P.v.4/CIDR" http.title:"sign up"



ip="I.P.v.4/CIDR" && title="sign up"



cidr:I.P.v.4/CIDR +title:"sign up"



IPv4

I.P.v.4/CIDR AND 443.https.get.title:"sign up"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Sign Up Pages**



net:"I.P.v.4/CIDR" "sign up"



ip="I.P.v.4/CIDR" && body="sign up"



cidr:I.P.v.4/CIDR +"sign up"



IPv4

I.P.v.4/CIDR AND 443.https.get.body:"sign up"



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My Methodology

# Use **Cyberspace** Engines To Discover **Sign Up Pages**



org:"Company Inc" http.title:"sign up"



org="Company Name Inc." && title="sign up"



organization:"Company" +title:"sign up"



 **IPv4**

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.title:"sign up"





attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Sign Up Pages**



org:"Company Inc" "sign up"



org="Company Name Inc." && body="sign up"



organization:"Company" +"sign up"



 **IPv4**

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.body:"sign up"



# Sign Up

First Name

Last Name

Email Address

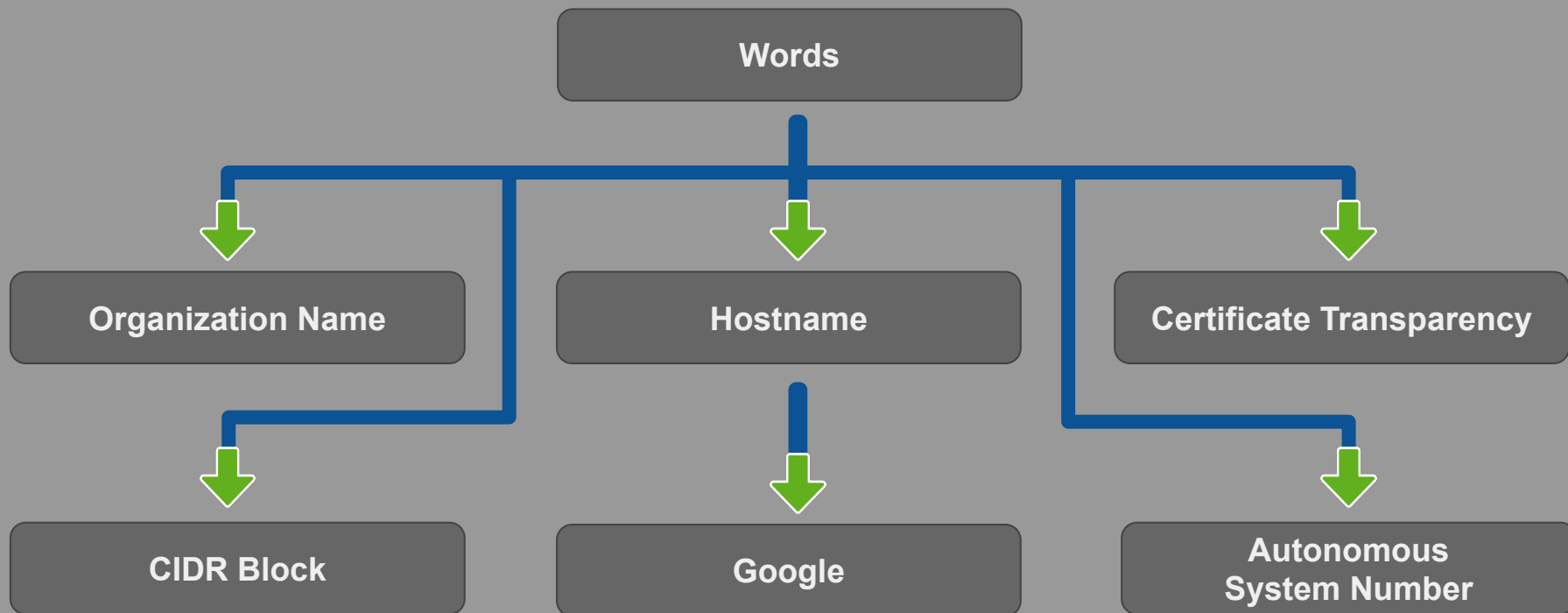
Password

## My Sign Up Checklist



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Log In Workflow





**attacker**

My Methodology

Use These **Words** While Searching About  
**Log In Pages**

"log in"

"sign in"

login



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **Log In Pages**



`ssl.cert.subject.cn:"company.com" http.title:"log in"`



`ssl:"company.com" http.title:"log in"`



`cert="company.com" && title="log in"`



`cert.subject="company" && title="log in"`



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **Log In Pages**



`ssl.cert.subject.cn:"company.com" "log in"`



`ssl:"company.com" "log in"`



`cert="company.com" && body="log in"`



`cert.subject="company" && body="log in"`



attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover Log In Pages



ssl:company.com +title:"log in"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.title:"log in"



attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover Log In Pages



ssl:company.com +"log in"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.body:"log in"





attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Log In Pages**



asn:ASN Number e.g. AS19551+http.title:"log in"



asn="Number e.g. 19551" && title="log in"



asn:Number e.g. 19551 +title:"log in"



 **IPv4**

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.title:"log in"



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My Methodology

# Use **Cyberspace** Engines To Discover **Log In Pages**



asn:ASN Number e.g. AS19551+"log in"



asn="Number e.g. 19551" && body="log in"



asn:Number e.g. 19551 +"log in"



 **IPv4**

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.body:"log in"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Log In Pages**



hostname:company.com http.title:"log in"



domain="company.com" && title="log in"



hostname:company.com +title:"log in"



Websites

company.com AND 443.https.get.title:"log in"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Log In Pages**



hostname:company.com "log in"



domain="company.com" && body="log in"



hostname:company.com +"log in"



Websites

company.com AND 443.https.get.body:"log in"



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My Methodology

# Find Log In Pages With Google



site:\*.company.com intitle:"log in"

Google Search

I'm Feeling Lucky



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My Methodology

# Use **Cyberspace** Engines To Discover **Log In Pages**



net:"I.P.v.4/CIDR" http.title:"log in"



ip="I.P.v.4/CIDR" && title="log in"



cidr:I.P.v.4/CIDR +title:"log in"



IPv4

I.P.v.4/CIDR AND 443.https.get.title:"log in"



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My Methodology

## Use **Cyberspace** Engines To Discover **Log In Pages**



net:"I.P.v.4/CIDR" "log in"



ip="I.P.v.4/CIDR" && body="log in"



cidr:I.P.v.4/CIDR +"log in"



IPv4

I.P.v.4/CIDR AND 443.https.get.body:"log in"



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My Methodology

## Use **Cyberspace** Engines To Discover **Log In Pages**



org:"Company Inc" http.title:"log in"



org="Company Name Inc." && title="log in"



organization:"Company" +title:"log in"



443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.title:"log in"





attacker

My Methodology

## Use **Cyberspace** Engines To Discover **Log In Pages**



org:"Company Inc" "log in"



org="Company Name Inc." && body="log in"



organization:"Company" +"log in"



443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.body:"log in"



# Log In

Email Address OR Mobile Number

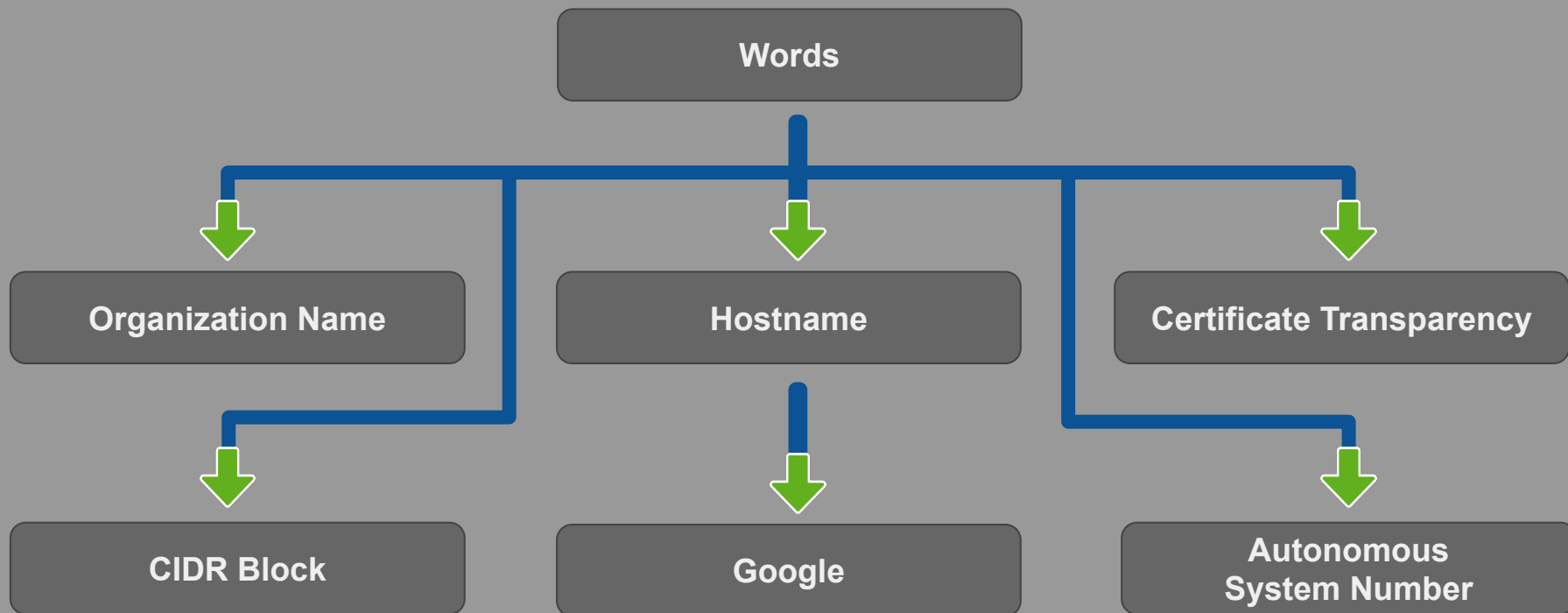
Password

## My Log In Checklist



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OAuth Workflow





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My Methodology

Use These **Words** While Searching About  
**OAuth Pages**

"log in with"

"login with"

"sign up with"

"signup with"

"sign in with"

"signin with"



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **OAuth Pages**



`ssl.cert.subject.cn:"company.com" http.title:"log in with"`



`ssl:"company.com" http.title:"log in with"`



`cert="company.com" && title="log in with"`



`cert.subject="company" && title="log in with"`



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My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **OAuth Pages**



```
ssl.cert.subject.cn:"company.com" http.status:302 oauth
```



```
ssl:"company.com" http.status:302 oauth
```



```
cert="company.com" && status_code="302" && header="oauth"
```



```
cert.subject="company" && status_code="302" && header="oauth"
```



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **OAuth Pages**



`ssl.cert.subject.cn:"company.com" oauth`



`ssl:"company.com" oauth`



`cert="company.com" && body="oauth"`



`cert.subject="company" && body="oauth"`



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My Methodology

# Use Zoomeye AND Censys Engines To Discover OAuth Pages



ssl:company.com +title:"log in with"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.title:"log in with"





attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover OAuth Pages



ssl:company.com +("302 Found" +"oauth")



IPv4

(443.tls.certificate.parsed.names:Company.com) AND 443.https.get.status\_code:302 AND 443.https.get.body:oauth



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My Methodology

# Use Zoomeye AND Censys Engines To Discover OAuth Pages



ssl:company.com +"log in with"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.body:"log in with"



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My Methodology

# Use **Cyberspace** Engines To Discover **OAuth Pages**



asn:ASN Number e.g. AS19551+http.title:"log in with"



asn="Number e.g. 19551" && title="log in with"



asn:Number e.g. 19551 +title:"log in with"



 **IPv4**

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.title:"log in with"



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My Methodology

# Use **Cyberspace** Engines To Discover **OAuth Pages**



asn:ASN Number e.g. AS19551 http.status:302 oauth



asn="Number" && status\_code="302" && header="oauth"



asn:Number +("302 Found" +"oauth")



 **IPv4**

(autonomous\_system.asn:Number) AND 443.https.get.status\_code:302 AND 443.https.get.body:oauth



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My Methodology

# Use **Cyberspace** Engines To Discover OAuth Pages



asn:ASN Number e.g. AS19551+"log in with"



asn="Number e.g. 19551" && body="log in with"



asn:Number e.g. 19551 +"log in with"



 **IPv4**

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.body:"log in with"



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My Methodology

# Use **Cyberspace** Engines To Discover OAuth Pages



hostname:company.com http.title:"log in with"



domain="company.com" && title="log in with"



hostname:company.com +title:"log in with"



 **Websites**

company.com AND 443.https.get.title:"log in with"



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My Methodology

# Use **Cyberspace** Engines To Discover OAuth Pages



hostname:company.com http.status:302 oauth



domain="company.com" && status\_code="302" && header="oauth"



hostname:company.com +("302 Found" +"oauth")



Websites

company.com AND 443.https.get.status\_code:302 AND 443.https.get.body:oauth



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **OAuth Pages**



hostname:company.com "log in with"



domain="company.com" && body="log in with"



hostname:company.com +"log in with"



Websites

company.com AND 443.https.get.body:"log in with"





**attacker**

My Methodology

# Find OAuth Pages With Google



site:\*.company.com intitle:"log in with"

Google Search

I'm Feeling Lucky



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My Methodology

# Use **Cyberspace** Engines To Discover OAuth Pages



net:"I.P.v.4/CIDR" http.title:"log in with"



ip="I.P.v.4/CIDR" && title="log in"



cidr:I.P.v.4/CIDR +title:"log in with"



IPv4

I.P.v.4/CIDR AND 443.https.get.title:"log in with"



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My Methodology

# Use **Cyberspace** Engines To Discover **OAuth Pages**



net:"I.P.v.4/CIDR" http.status:302 oauth



ip="I.P.v.4/CIDR" && status\_code="302" && header="oauth"



cidr:I.P.v.4/CIDR +("302 Found" +"oauth")



IPv4

(I.P.v.4/CIDR) AND 443.https.get.status\_code:302 AND 443.https.get.body:oauth



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My Methodology

## Use **Cyberspace** Engines To Discover **OAuth Pages**



net:"I.P.v.4/CIDR" "log in with"



ip="I.P.v.4/CIDR" && body="log in"



cidr:I.P.v.4/CIDR +"log in with"



IPv4

I.P.v.4/CIDR AND 443.https.get.body:"log in with"



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My Methodology

# Use **Cyberspace** Engines To Discover OAuth Pages



org:"Company Inc" http.title:"log in with"



org="Company Name Inc." && title="log in with"



organization:"Company" +title:"log in with"



 IPv4

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.title:"log in with"



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My Methodology

# Use **Cyberspace** Engines To Discover OAuth Pages



org:"Company Inc" http.status:302 oauth



org="Company Name Inc." && status\_code="302" && header="oauth"



organization:"Company" +("302 Found" +"oauth")



 IPv4

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND  
443.https.get.status\_code:302 AND 443.https.get.body:oauth



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My Methodology

# Use **Cyberspace** Engines To Discover **OAuth Pages**



org:"Company Inc" oauth



org="Company Name Inc." && body="oauth"



organization:"Company" +"oauth"



 **IPv4**

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.body:oauth



# OAuth

**Sign Up AND Log In**



Sign Up With Google



Log In With Apple

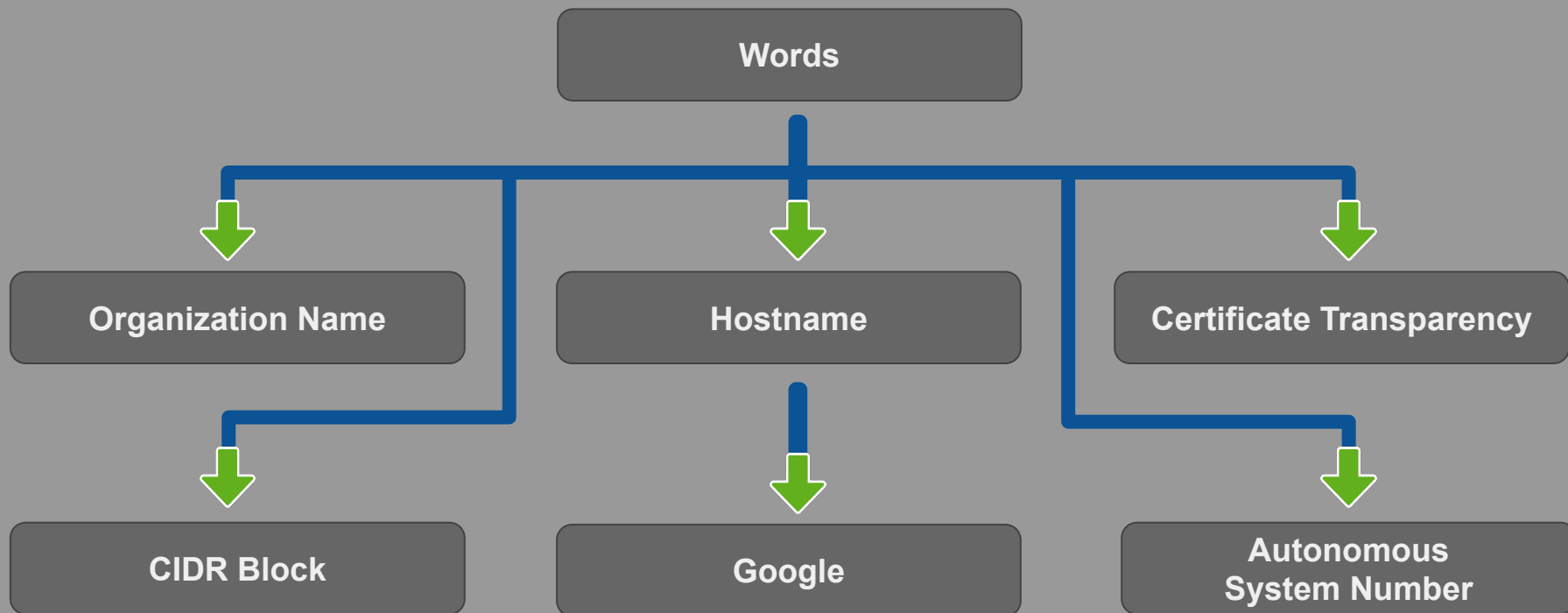
# My OAuth Checklist





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SSO Workflow





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My Methodology

# Use These **Words** While Searching About **Single Sign-On Pages**

**"sso login"**

**"login with sso"**

**SAMLRequest**



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My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **Single Sign-On Pages**



`ssl.cert.subject.cn:"company.com" http.title:"login sso"`



`ssl:"company.com" http.title:"login sso"`



`cert="company.com" && title="login sso"`



`cert.subject="company" && title="login sso"`



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **Single Sign-On Pages**



```
ssl.cert.subject.cn:"company.com" http.status:302 sso
```



```
ssl:"company.com" http.status:302 sso
```



```
cert="company.com" && status_code="302" && header="sso"
```



```
cert.subject="company" && status_code="302" && header="sso"
```



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My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **Single Sign-On Pages**



`ssl.cert.subject.cn:"company.com" "login sso"`



`ssl:"company.com" "login sso"`



`cert="company.com" && body="login sso"`



`cert.subject="company" && body="login sso"`



attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover Single Sign-On Pages



ssl:company.com +title:"sso"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.title:"sso"



attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover Single Sign-On Pages



ssl:company.com +("302 Found" +"sso")



IPv4

(443.https.tls.certificate.parsed.names:Company.com) AND 443.https.get.status\_code:302 AND 443.https.get.body:sso



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My Methodology

# Use Zoomeye AND Censys Engines To Discover Single Sign-On Pages



ssl:company.com +sso



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.body:"sso"





attacker

My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



asn:ASN Number e.g. AS19551+http.title:"sso"



asn="Number e.g. 19551" && title="sso"



asn:Number e.g. 19551 +title:"sso"



IPv4

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.title:"sso"



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My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



asn:ASN Number e.g. AS19551 http.status:302 sso



asn="Number" && status\_code="302" && header="sso"



asn:Number +("302 Found" +"sso")



IPv4

(autonomous\_system.asn:Number) AND 443.https.get.status\_code:302 AND 443.https.get.body:sso



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



asn:ASN Number e.g. AS19551+sso



asn="Number e.g. 19551" && body="sso"



asn:Number e.g. 19551 +sso



 **IPv4**

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.body:"sso"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



hostname:company.com http.title:"sso"



domain="company.com" && title="sso"



hostname:company.com +title:"sso"



Websites

company.com AND 443.https.get.title:"sso"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



hostname:company.com http.status:302 sso



domain="company.com" && status\_code="302" && header="sso"



hostname:company.com +("302 Found" +"sso")



Websites

company.com AND 443.https.get.status\_code:302 AND 443.https.get.body:sso



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



hostname:company.com sso



domain="company.com" && body="sso"



hostname:company.com +sso



**Websites**

company.com AND 443.https.get.body:"sso"



attacker

My Methodology

# Find Single Sign-On Pages With

# Google



site:\*.company.com intitle:"sso"

Google Search

I'm Feeling Lucky



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



net:"I.P.v.4/CIDR" http.title:"sso"



ip="I.P.v.4/CIDR" && title="sso"



cidr:I.P.v.4/CIDR +title:"sso"



IPv4

I.P.v.4/CIDR AND 443.https.get.title:"sso"





attacker

My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



net:"I.P.v.4/CIDR" http.status:302 sso



ip="I.P.v.4/CIDR" && status\_code="302" && header="sso"



cidr:I.P.v.4/CIDR +("302 Found" +"sso")



IPv4

(I.P.v.4/CIDR) AND 443.https.get.status\_code:302 AND 443.https.get.body:sso



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



net:"I.P.v.4/CIDR" sso



ip="I.P.v.4/CIDR" && body="sso"



cidr:I.P.v.4/CIDR +sso



IPv4

I.P.v.4/CIDR AND 443.https.get.body:"sso"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



org:"Company Inc" http.title:"sso"



org="Company Name Inc." && title="sso"



organization:"Company" +title:"sso"



IPv4

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.title:sso



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



org:"Company Inc" http.status:302 sso



org="Company Name Inc." && status\_code="302" && header="sso"



organization:"Company" +("302 Found" +"sso")



 IPv4

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND  
443.https.get.status\_code:302 AND 443.https.get.body:sso



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Single Sign-On Pages



org:"Company Inc" sso



org="Company Name Inc." && body="sso"



organization:"Company" +sso



IPv4

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.body:sso



# SSO

## Single Sign-On

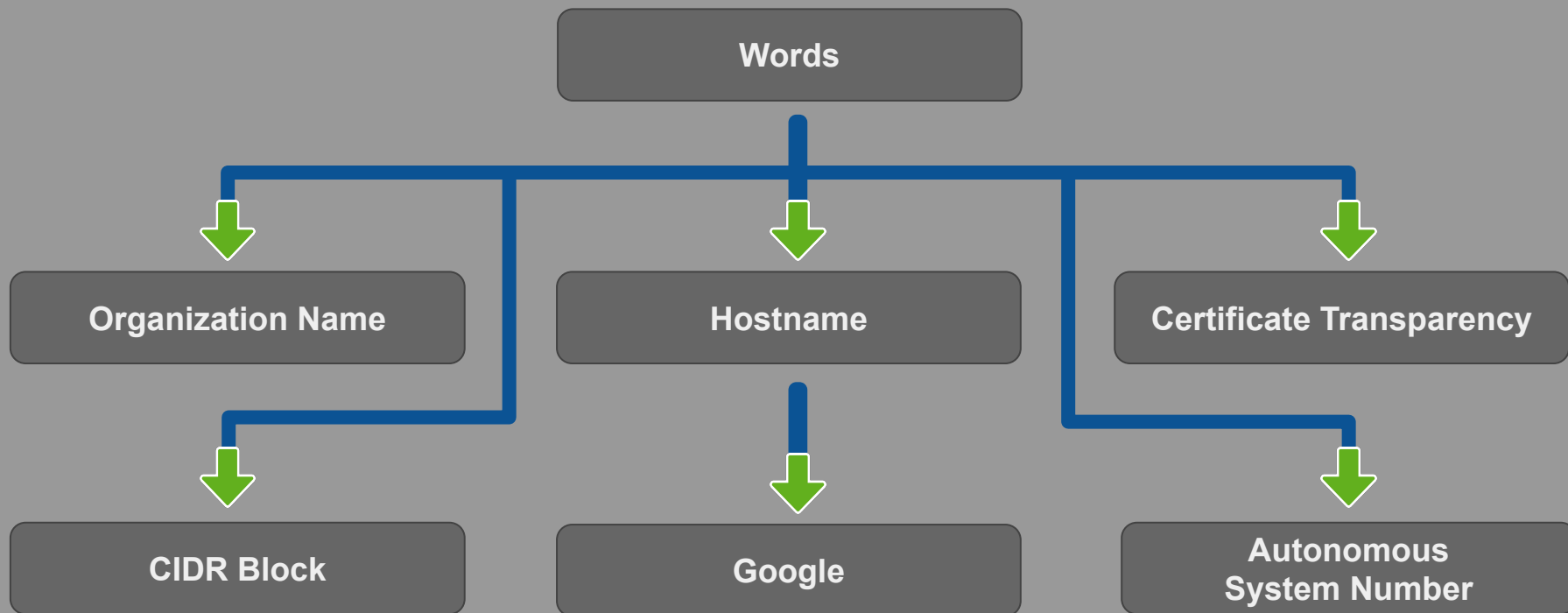


**My SSO Checklist**



**attacker**

## Reset Password Workflow





**attacker**

My Methodology

Use These **Words** While Searching About  
**Reset Password Pages**

**reset pass**

**forget**

**password**





attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **Reset Password Pages**



```
ssl.cert.subject.cn:"company.com" http.title:"password"
```



```
ssl:"company.com" http.title:"password"
```



```
cert="company.com" && title="password"
```



```
cert.subject="company" && title="password"
```



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **Reset Password Pages**



`ssl.cert.subject.cn:"company.com" "reset pass"`



`ssl:"company.com" "reset pass"`



`cert="company.com" && body="reset pass"`



`cert.subject="company" && body="reset pass"`



attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover Reset Password Pages



ssl:company.com +title:"password"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.title:"password"



attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover Reset Password Pages



ssl:company.com +"reset pass"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.body:"reset pass"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Reset Password Pages



asn:ASN Number e.g. AS19551+http.title:"password"



asn="Number e.g. 19551" && title="password"



asn:Number e.g. 19551 +title:"password"



IPv4

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.title:"password"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Reset Password Pages



asn:ASN Number e.g. AS19551+"reset pass"



asn="Number e.g. 19551" && body="reset pass"



asn:Number e.g. 19551 +"reset pass"



 IPv4

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.body:"reset pass"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Reset Password Pages



hostname:company.com http.title:"password"



domain="company.com" && title="password"



hostname:company.com +title:"password"



Websites

company.com AND 443.https.get.title:"password"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Reset Password Pages



hostname:company.com "reset pass"



domain="company.com" && body="password"



hostname:company.com +"reset pass"



Websites

company.com AND 443.https.get.body:"reset pass"





attacker

My Methodology

# Find Reset Password Pages With

# Google



site:\*.company.com intitle:"password"

Google Search

I'm Feeling Lucky



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Reset Password Pages



net:"I.P.v.4/CIDR" http.title:"password"



ip="I.P.v.4/CIDR" && title="password"



cidr:I.P.v.4/CIDR +title:"password"



IPv4

I.P.v.4/CIDR AND 443.https.get.title:"password"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Reset Password Pages



net:"I.P.v.4/CIDR" "reset pass"



ip="I.P.v.4/CIDR" && body="reset pass"



cidr:I.P.v.4/CIDR +"reset pass"



IPv4

I.P.v.4/CIDR AND 443.https.get.body:"reset pass"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Reset Password Pages



org:"Company Inc" http.title:"password"



org="Company Name Inc." && title="password"



organization:"Company" +title:"password"



IPv4

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.title:"reset pass"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Reset Password Pages



org:"Company Inc" "password"



org="Company Name Inc." && body="password"



organization:"Company" +"password"



 IPv4

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.body:"password"



# ATO

## Reset Password

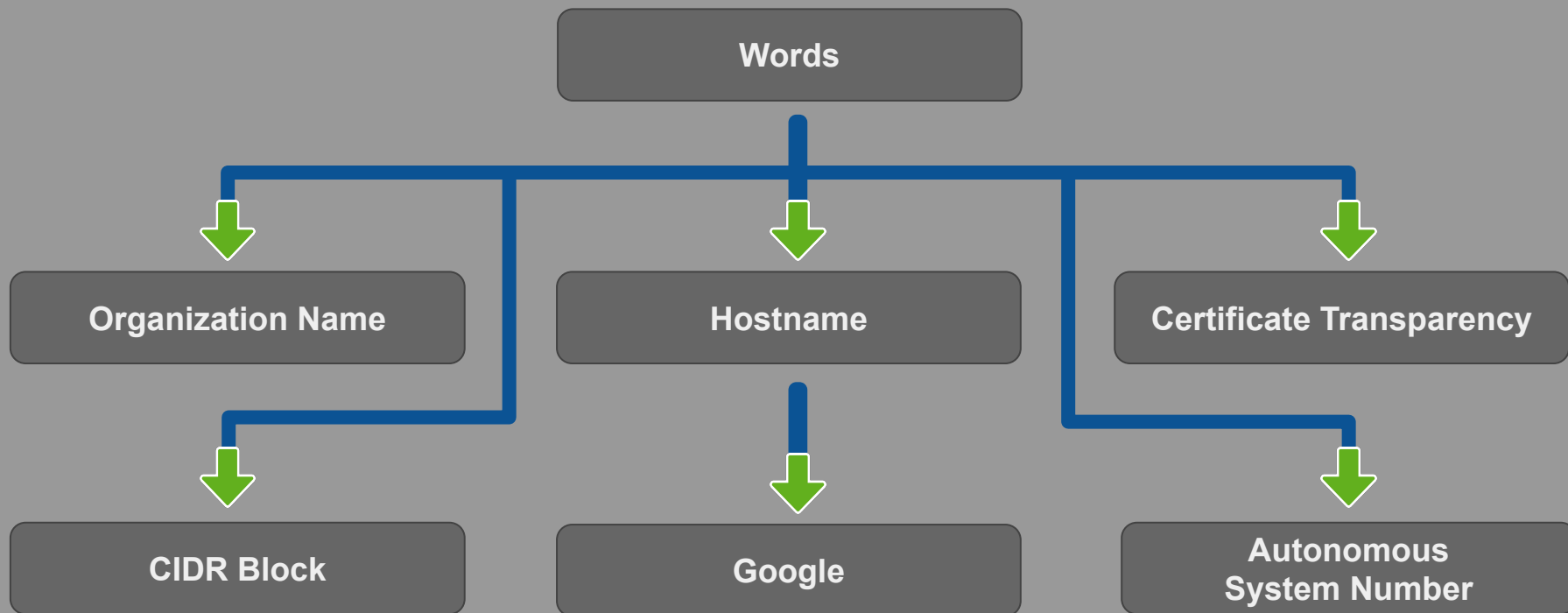
Email Address OR Mobile Number

# My resetPASS Checklist



**attacker**

## File Upload Workflow





**attacker**

My Methodology

# Use These **Words** While Searching About **File Upload Pages**

**"file upload"**

**upload**

**uploading**





attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **File Upload Pages**



```
ssl.cert.subject.cn:"company.com" http.title:"upload"
```



```
ssl:"company.com" http.title:"upload"
```



```
cert="company.com" && title="upload"
```



```
cert.subject="company" && title="upload"
```



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **File Upload Pages**



```
ssl.cert.subject.cn:"company.com" "upload"
```



```
ssl:"company.com" "upload"
```



```
cert="company.com" && body="upload"
```



```
cert.subject="company" && body="upload"
```



attacker

My Methodology

# Use **Zoomeye** AND **Censys** Engines To Discover **File Upload Pages**



ssl:company.com +title:"upload"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.title:"upload"



attacker

My Methodology

# Use **Zoomeye** AND **Censys** Engines To Discover **File Upload Pages**



ssl:company.com +"upload"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.body:"upload"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **File Upload Pages**



asn:ASN Number e.g. AS19551+http.title:"upload"



asn="Number e.g. 19551" && title="upload"



asn:Number e.g. 19551 +title:"upload"



 **IPv4**

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.title:"upload"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **File Upload Pages**



asn:ASN Number e.g. AS19551+"upload"



asn="Number e.g. 19551" && body="upload"



asn:Number e.g. 19551 +"upload"



IPv4

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.body:"upload"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **File Upload Pages**



hostname:company.com http.title:"upload"



domain="company.com" && title="upload"



hostname:company.com +title:"upload"



Websites

company.com AND 443.https.get.title:"upload"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **File Upload Pages**



hostname:company.com "upload"



domain="company.com" && body="upload"



hostname:company.com +"upload"



 **Websites**

company.com AND 443.https.get.body:"upload"





**attacker**

My Methodology

# Find File Upload Pages With

# Google



site:\*.company.com intitle:"upload"

Google Search

I'm Feeling Lucky



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **File Upload Pages**



net:"I.P.v.4/CIDR" http.title:"upload"



ip="I.P.v.4/CIDR" && title="upload"



cidr:I.P.v.4/CIDR +title:"upload"



IPv4

I.P.v.4/CIDR AND 443.https.get.title:"upload"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **File Upload Pages**



net:"I.P.v.4/CIDR" "upload"



ip="I.P.v.4/CIDR" && body="upload"



cidr:I.P.v.4/CIDR +"upload"



IPv4

I.P.v.4/CIDR AND 443.https.get.body:"upload"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **File Upload Pages**



org:"Company Inc" http.title:"upload"



org="Company Name Inc." && title="upload"



organization:"Company" +title:"upload"



 **IPv4**

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.title:"upload"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **File Upload Pages**



org:"Company Inc" "upload"



org="Company Name Inc." && body="upload"



organization:"Company" +"upload"



 **IPv4**

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.body:"upload"



# File Upload



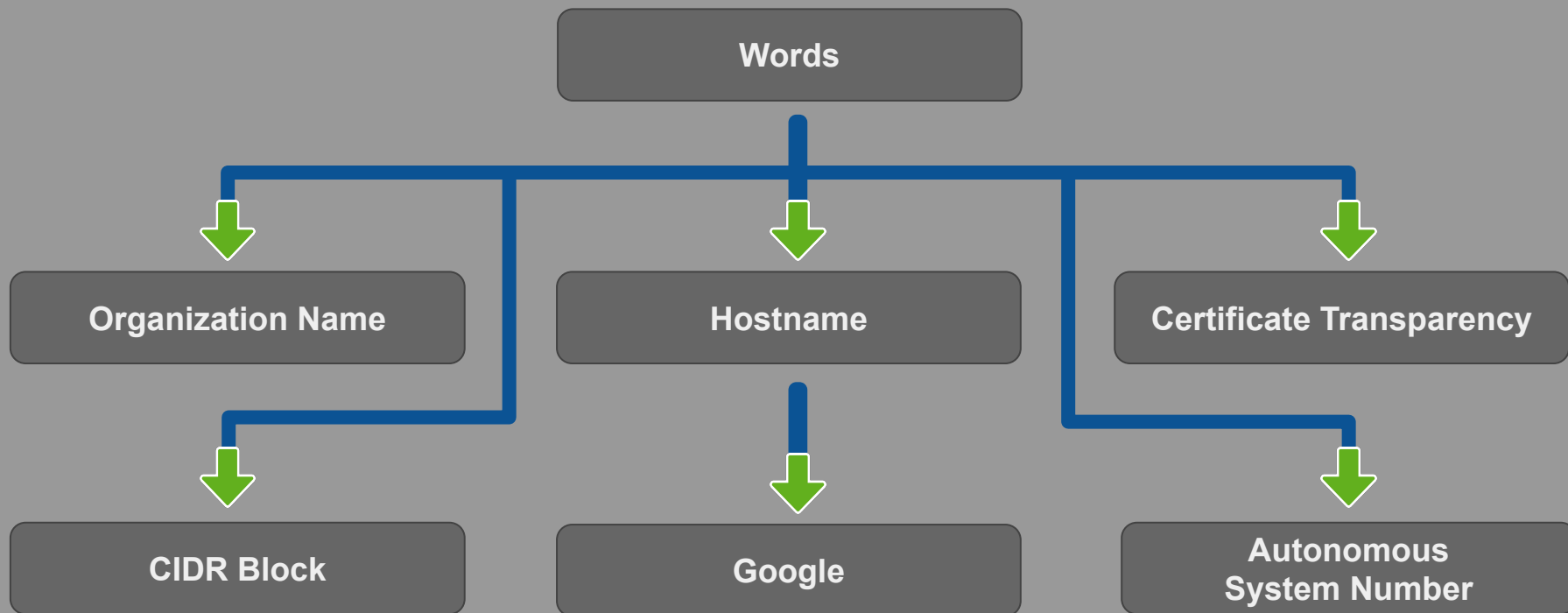
Upload File From Your Computer

## My File Upload Checklist



**attacker**

## Settings Workflow





attacker

My Methodology

Use These **Words** While Searching About  
**Settings Pages**

**settings**

**"edit profile"**





attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **Settings Pages**



```
ssl.cert.subject.cn:"company.com" http.title:"settings"
```



```
ssl:"company.com" http.title:"settings"
```



```
cert="company.com" && title="settings"
```



```
cert.subject="company" && title="settings"
```



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover **Settings Pages**



`ssl.cert.subject.cn:"company.com" "settings"`



`ssl:"company.com" "settings"`



`cert="company.com" && body="settings"`



`cert.subject="company" && body="settings"`



**attacker**

My Methodology

# Use **Zoomeye** AND **Censys** Engines To Discover **Settings Pages**



**ssl:company.com +title:"settings"**



**IPv4**

**(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.title:"settings"**



attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover Settings Pages



ssl:company.com +"settings"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.body:"settings"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Settings Pages**



asn:ASN Number e.g. AS19551+http.title:"settings"



asn="Number e.g. 19551" && title="settings"



asn:Number e.g. 19551 +title:"settings"



(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.title:"settings"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Settings Pages**



asn:ASN Number e.g. AS19551+"settings"



asn="Number e.g. 19551" && body="settings"



asn:Number e.g. 19551 +"settings"



 **IPv4**

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.body:"settings"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Settings Pages**



hostname:company.com http.title:"settings"



domain="company.com" && title="settings"



hostname:company.com +title:"settings"



 **Websites**

company.com AND 443.https.get.title:"settings"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Settings Pages**



hostname:company.com "settings"



domain="company.com" && body="settings"



hostname:company.com +"settings"



Websites

company.com AND 443.https.get.body:"settings"





**attacker**

My Methodology

# Find Settings Pages With

# Google



**site:\*.company.com intitle:"settings"**

Google Search

I'm Feeling Lucky



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Settings Pages**



net:"I.P.v.4/CIDR" http.title:"settings"



ip="I.P.v.4/CIDR" && title="settings"



cidr:I.P.v.4/CIDR +title:"settings"



IPv4

I.P.v.4/CIDR AND 443.https.get.title:"settings"



attacker

My Methodology

## Use **Cyberspace** Engines To Discover **Settings Pages**



net:"I.P.v.4/CIDR" "settings"



ip="I.P.v.4/CIDR" && body="settings"



cidr:I.P.v.4/CIDR +"settings"



IPv4

I.P.v.4/CIDR AND 443.https.get.body:"settings"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Settings Pages**



org:"Company Inc" http.title:"settings"



org="Company Name Inc." && title="settings"



organization:"Company" +title:"settings"



443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.title:"settings"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover **Settings Pages**



org:"Company Inc" "settings"



org="Company Name Inc." && body="settings"



organization:"Company" +"settings"



 **IPv4**

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.body:"settings"



# Settings

**Edit - Add - Remove**



Settings

User company.com/me [Edit](#)

Email me@gmail.com [Edit](#)

Password \*\*\*\*\* [Edit](#)

Phone 01\*\*\*\*\* [Add](#)

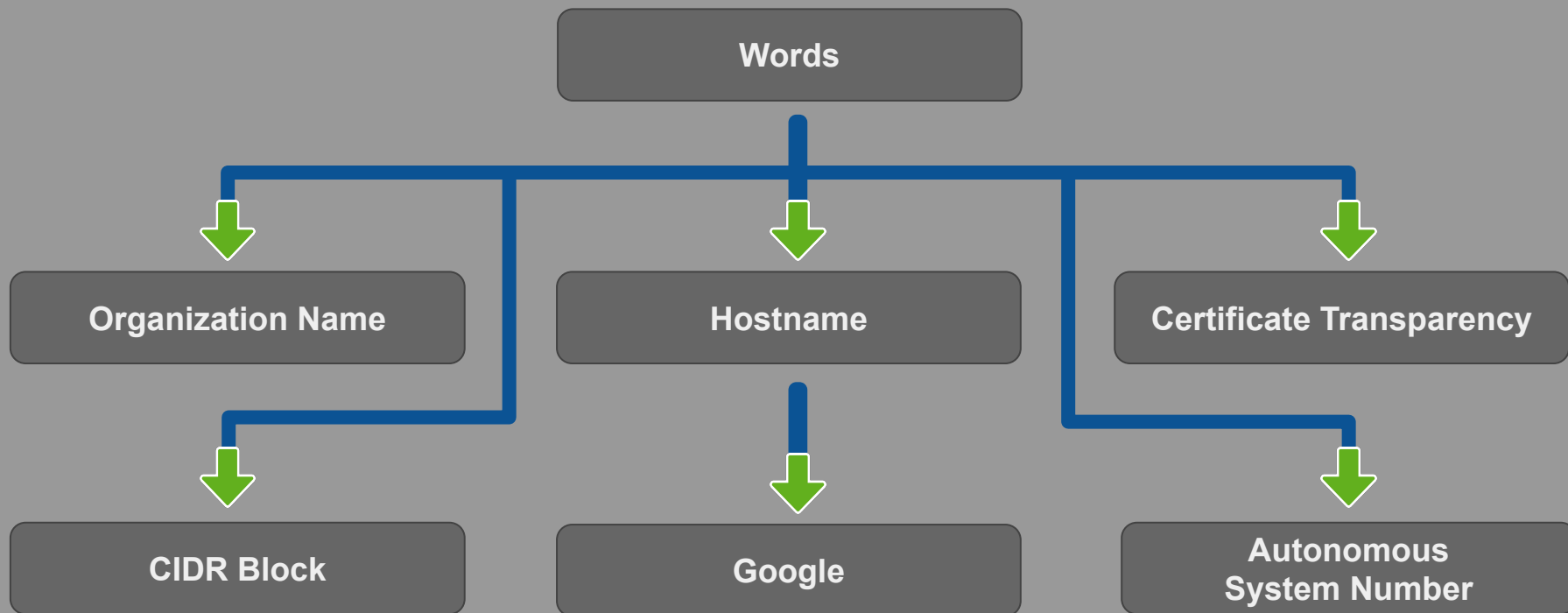
Your Account [Remove](#)

# My Settings Checklist



**attacker**

## Contact Support Team Workflow





attacker

My Methodology

Use These **Words** While Searching About  
**Contact Support Pages**

support

"contact us"





attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover Contact Support Pages



```
ssl.cert.subject.cn:"company.com" http.title:"support"
```



```
ssl:"company.com" http.title:"support"
```



```
cert="company.com" && title="support"
```



```
cert.subject="company" && title="support"
```



attacker

My Methodology

# Use **Shodan** AND **Fofa** Engines To Discover Contact Support Pages



`ssl.cert.subject.cn:"company.com" "support"`



`ssl:"company.com" "support"`



`cert="company.com" && body="support"`



`cert.subject="company" && body="support"`



attacker

My Methodology

# Use **Zoomeye** AND **Censys** Engines To Discover **Contact Support Pages**



`ssl:company.com +title:"support"`



 **IPv4**

`(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.title:"support"`



attacker

My Methodology

# Use Zoomeye AND Censys Engines To Discover Contact Support Pages



ssl:company.com +"support"



IPv4

(443.https.tls.certificate.parsed.names:company.com) AND 443.https.get.body:"support"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Contact Support Pages



asn:ASN Number e.g. AS19551+http.title:"support"



asn="Number e.g. 19551" && title="support"



asn:Number e.g. 19551 +title:"support"



IPv4

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.title:"support"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Contact Support Pages



asn:ASN Number e.g. AS19551+"support"



asn="Number e.g. 19551" && body="support"



asn:Number e.g. 19551 +"support"



 IPv4

(autonomous\_system.asn:Number e.g. 19551) AND 443.https.get.body:"support"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Contact Support Pages



hostname:company.com http.title:"support"



domain="company.com" && title="support"



hostname:company.com +title:"support"



Websites

company.com AND 443.https.get.title:"support"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Contact Support Pages



hostname:company.com "support"



domain="company.com" && body="support"



hostname:company.com +"support"



Websites

company.com AND 443.https.get.body:"support"





**attacker**

My Methodology

# Find Contact Support Pages With

# Google



site:\*.company.com intitle:"support"

Google Search

I'm Feeling Lucky



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Contact Support Pages



net:"I.P.v.4/CIDR" http.title:"support"



ip="I.P.v.4/CIDR" && title="support"



cidr:I.P.v.4/CIDR +title:"support"



IPv4

I.P.v.4/CIDR AND 443.https.get.title:"support"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Contact Support Pages



net:"I.P.v.4/CIDR" "support"



ip="I.P.v.4/CIDR" && body="support"



cidr:I.P.v.4/CIDR +"support"



IPv4

I.P.v.4/CIDR AND 443.https.get.body:"support"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Contact Support Pages



org:"Company Inc" http.title:"support"



org="Company Name Inc." && title="support"



organization:"Company" +title:"support"



 IPv4

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.title:"support"



attacker

My Methodology

# Use **Cyberspace** Engines To Discover Contact Support Pages



org:"Company Inc" "support"



org="Company Name Inc." && body="support"



organization:"Company" +"support"



IPv4

443.https.tls.certificate.parsed.subject.organization:"Company Inc" AND 443.https.get.body:"support"



# Contact

## Support Of The Company

Email Address

Describe Your Issue

Message

# My Contact Team Checklist

# Thank You

**Mahmoud M. Awali**

 **@0xAwali**