

# Digital Life @ Workplace and Home

Transactions, Email, Websites, Social and Mobile.



Jaipur  
23<sup>rd</sup> Feb 2019

Ajay Data  
Chirag Patel

www.cafe123.com



Third Level Domain    Second Level Domain    Top Level Domain (TLD)



**Syntax of ASCII TLD**

Use only **Letters [a-z]**

हिन्दी.भारत



IDN Second Level Domain    IDN Top Level Domain (TLD)



**Syntax of IDN TLD**

**U-Label**, constrained by the **“letter” principle**

# Understanding Domain Names

# IPV6

128 bits each

total range = 340 undecillion  
possible addresses

2001:db8::ff00:42:8329

VS

# IPV4

4 bytes each

total range = 4.3 billion  
possible addresses

123.45.67.89

Understanding IP Address

For IPv4, this pool is 32-bits ( $2^{32}$ )  
in size and contains

**4,294,967,296** IPv4 addresses.

The IPv6 address space is 128-  
bits ( $2^{128}$ ) in size, containing

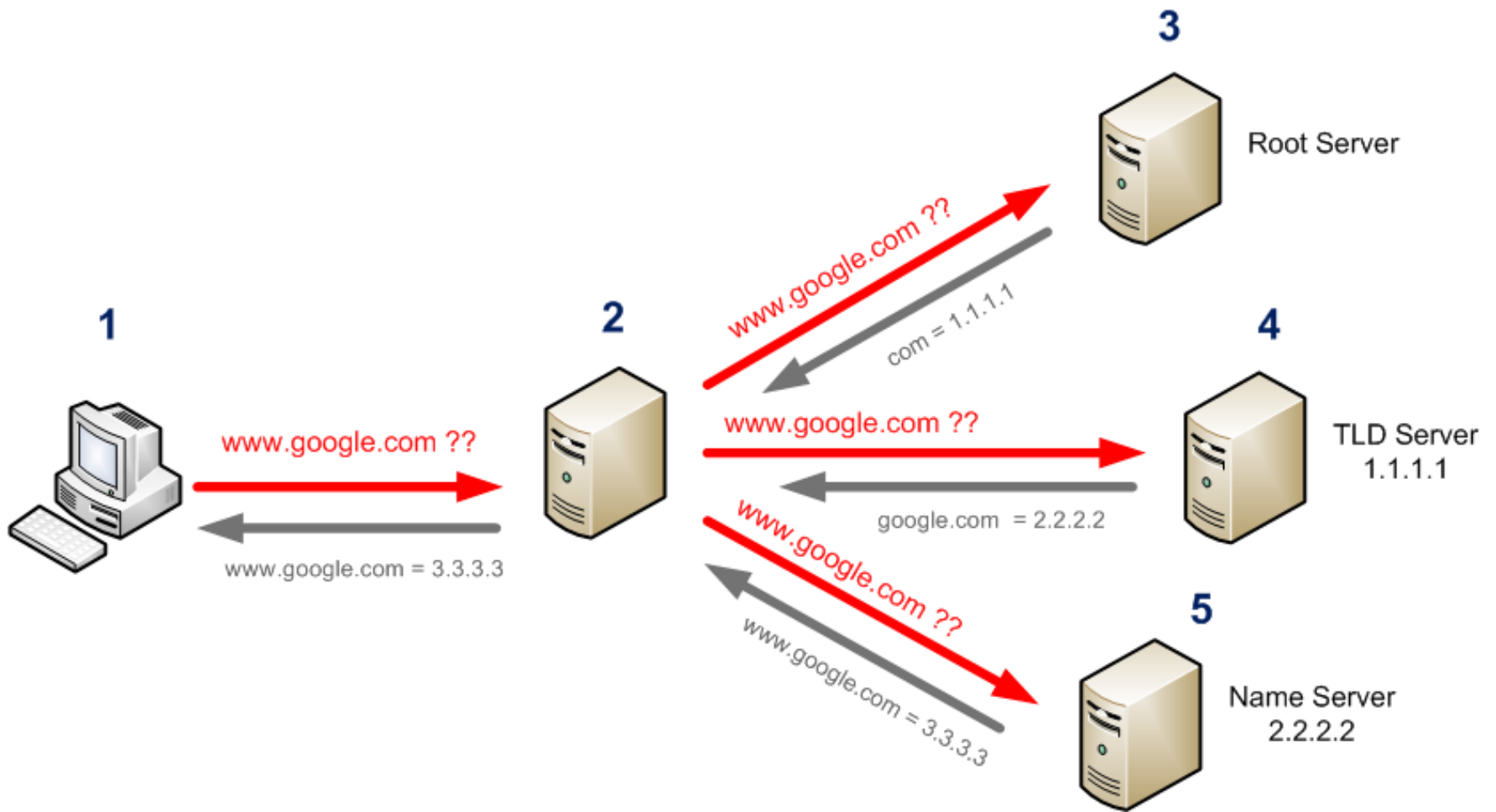
**340,282,366,920,938,463,463,37  
4,607,431,768,211,456** IPv6 addresses

Look at exact numbers

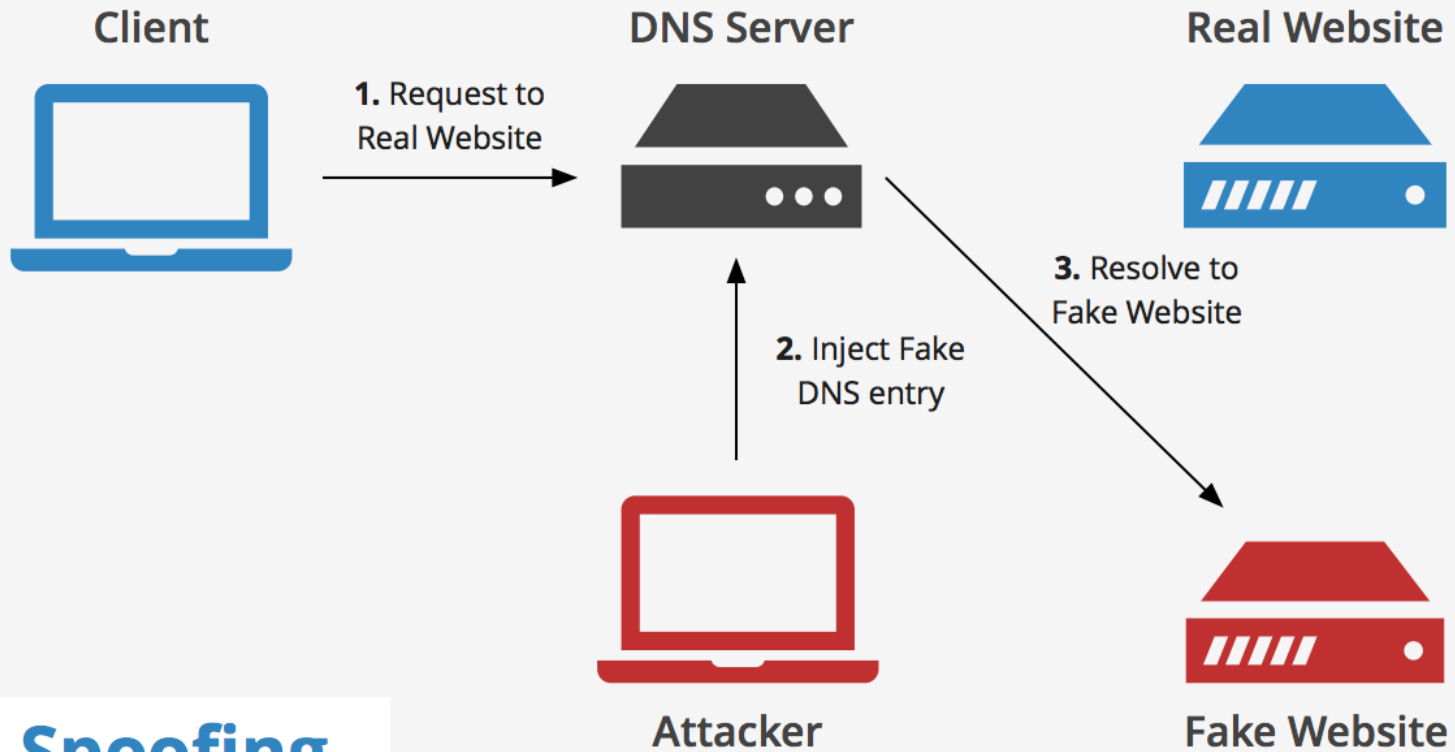
**chirag**@koohsports.com

**अजय**@डाटा.भारत

Understanding Email Addresses



# Understanding DNS



## DNS Spoofing

Taking you to fake website

**ED@tierajasthan.org      chirag@ORACLE.IN**

**सम@ठग.भारत**

**समझो@ठग.भारत**

**Lets see some examples**



ED@Tierajasthan.com

सम@ठग.भारत

CHIRAG@ORACLE.IN

समझो@ठग.भारत

You can check yourself at  
<https://eai.xgenplus.com>

Lets analyse them closely

1. Sender email address.
2. headers of emails.
3. Links in emails.
4. Attachments.

**SSL – 100% times**

**Transactional Alert Emails**

# SSL – Secured Socket Layer

Security

# Man in Middle / Hiding behind the wall


Proxy

# Fundamentals

## CIA

- Confidentiality
- Integrity
- Availability

## Layers

- Physical – First line of defence  
(external/internal) Guard, Camera, Access Control etc.
  - Device Security – Servers, Deskstops, Mobile, Network, Storage
- 

# Thoughts

**“We live in a world that has walls  
and those walls need to be  
guarded by men with guns” –**

**Dialogue from From Few Good Men**

**Securing your Digital Life is not an  
option – Quote by Ajay Data**

