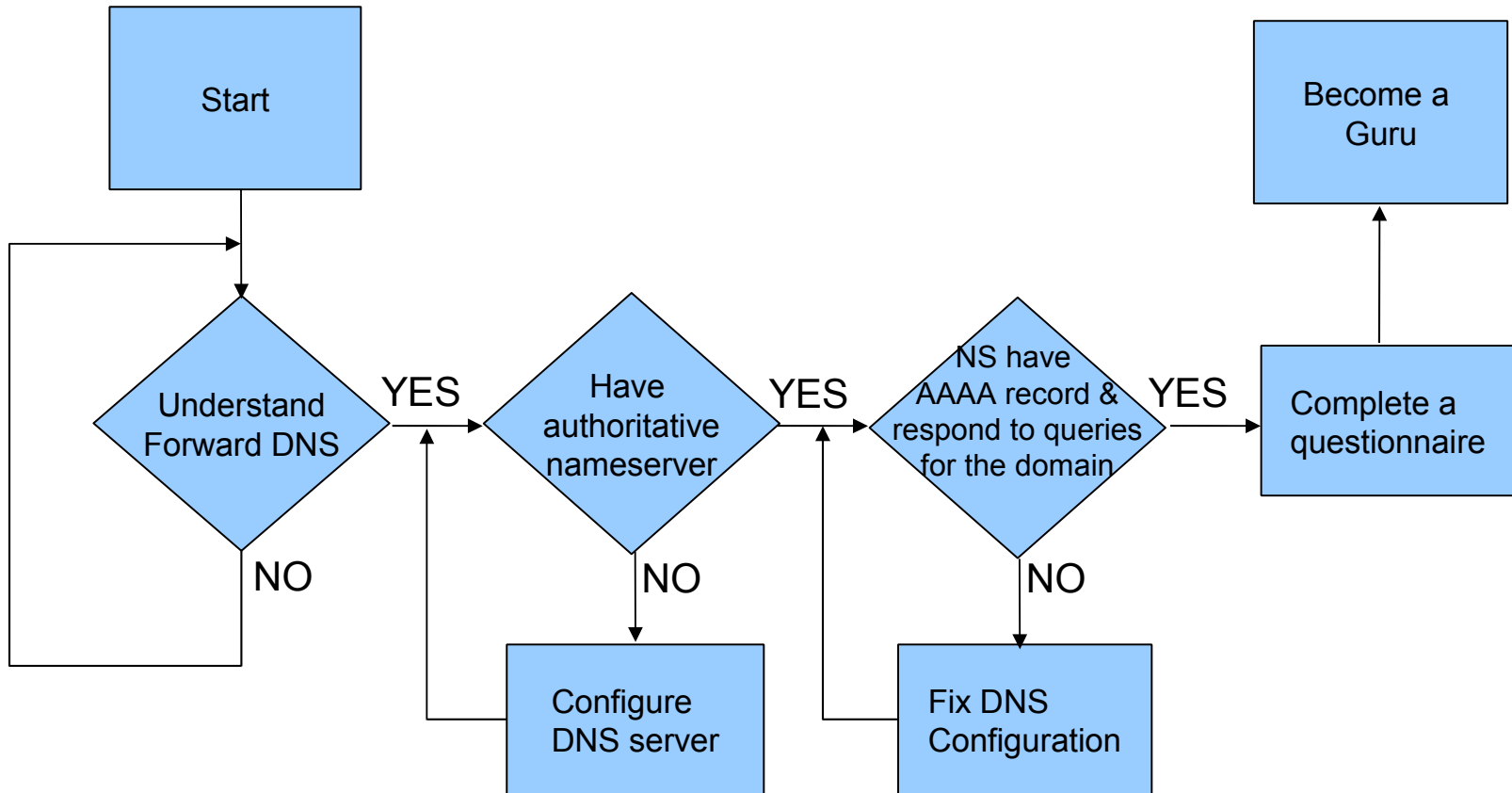

IPv6 Certification Program General Tutorial Session

Level - Guru

FLOW CHART



Key Concepts

- DNS – Domain Name System
 - a. Associates various information with domain name
 - b. distributes the responsibility of assigning domain names and mapping those names to IP addresses by designating authoritative name servers for each domain
- Forward DNS – a domain name maps to an IP address
- Reverse DNS – an IP address maps to a domain name



General Overview

- Guru Test checks whether the authoritative NS for your domain have AAAA records and respond to queries for the domain or not.
- In order to pass the level, your authoritative nameserver must have AAAA record.



BIND Example – Reference ONLY

■ named.conf

```
zone "yourdomain.com" IN {  
    type master;  
    file "yourdomain.com.zone";  
};
```

■ yourdomain.com.zone

```
$TTL 86400  
@          IN          SOA      ns1.yourdomain.com. your_email. ( ... )  
          IN          NS       ns1.yourdomain.com.  
          IN          AAAA     $domain_ipv6_address  
ns1        IN          AAAA     $ns1_ipv6_address
```



Guru Test Page

Additional Tests

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Print Certificate:



Add your certification to your webpage with this HTML:

```

<a href="http://ipv6.he.net/certification
/scoresheet.php?pass_name=certTutor" target="_blank"></img></a>
    
```

Guru

Congratulations, you are an IPv6 Professional! To complete the Guru Test you will need:

- The Name Servers for need to have a AAAA records
- Those Name Servers need to respond to queries made via IPv6

[\[Reset Test\]](#)

Help	Step	Description	Data
*	1	If you need to edit off any subdomains to make it work, please do so here:	<input type="text"/>
*	2	Check to see that the nameservers associated with have IPv6 AAAAs	<input type="button" value="Test It!"/>
*	3	Check to see that the nameservers associated with are IPv6 accessible	<input type="button" value="Test It!"/>

Services

[Transit](#)
[Colocation](#)
[Dedicated Servers](#)

v4 Exhaustion

IPv4 & IPv6 Statistics

v4 Addresses
469,287,293 ↓

v4 /8s Left
10% (28/256)

v6 Networks
4% (1,553/32,194)

v6 Ready TLDs
79% (222/280)

v6 Glue
1,387

v6 Domains
1,539,588 ↑

679

HURRICANE ELECTRIC
Days Remaining



Guru Test Page

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Guru Questionnaire

Congratulations you have completed the test: **Guru Questionnaire**

Your score was 4 OF 4.

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Additional Tests

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Top 10 Certs

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Services

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v4 Exhaustion



Troubleshoot Method

- Use the following dig commands to see whether your authoritative nameserver have AAAA records

```
:~$ dig NS $domain +short
```

```
:~$ dig AAAA $NS +short
```

```
:~$ dig AAAA $domain @$nsAAAA
```



Q&A



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