

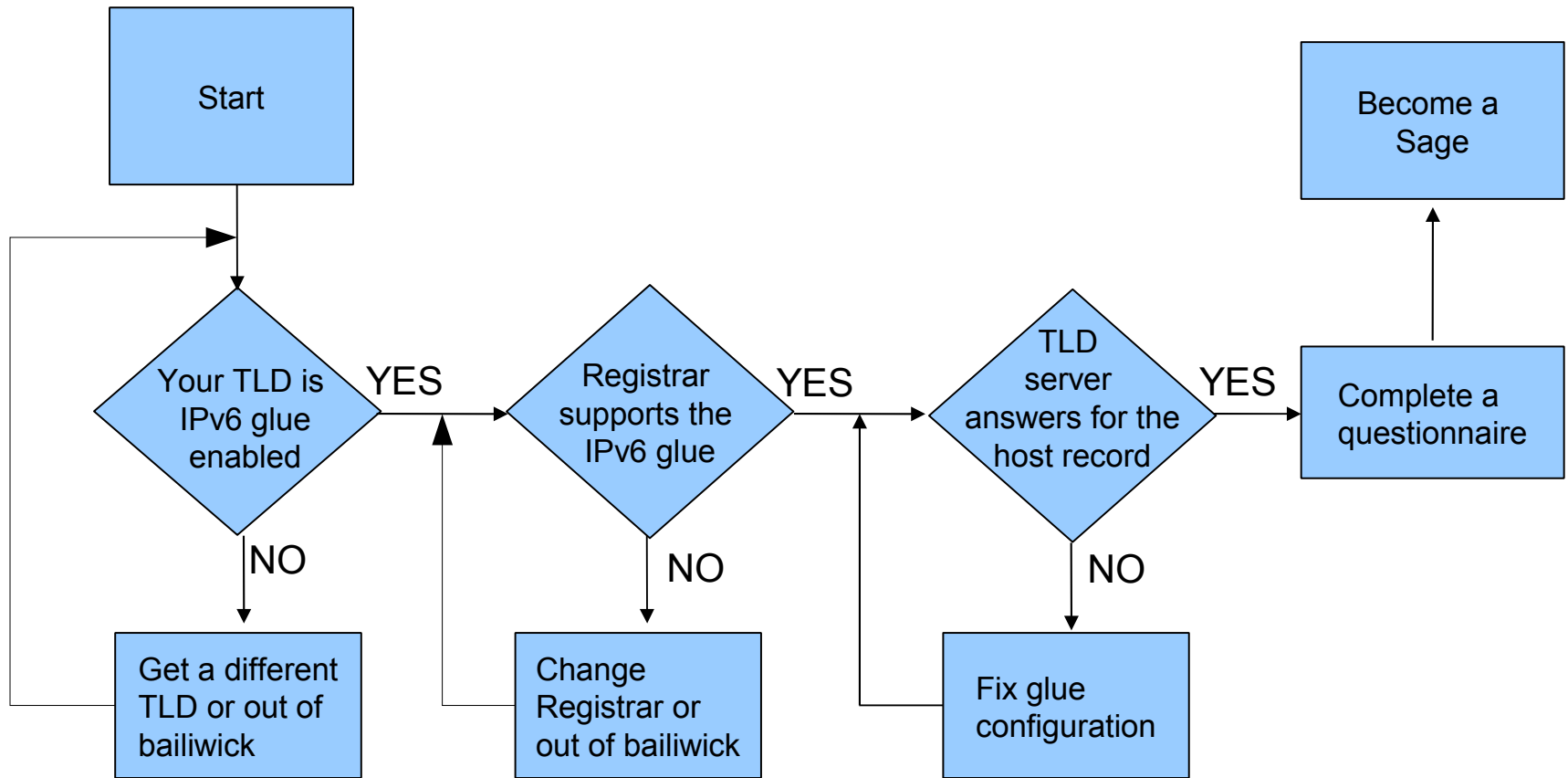
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# IPv6 Certification Program General Tutorial Session

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Level - Sage

# FLOW CHART



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# Key Concepts

- Glue record – is registered with the registrar and the IP address of a name server found at the TLD.
- Registrar – An organization that is able to register domains
- Registry – An organization responsible for operating the authoritative nameserver and database for a TLD (Top Level Domain)



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# General Overview

- Sage Test checks whether your domain's authoritative NS have IPv6 glue with their listed TLD servers or not.
- In order to pass the level, you must have IPv6 glue for your nameserver.



# Sage Test Page

## Additional Tests

Enthusiast Technical Test  
Administrator Technical Test  
Professional Technical Test  
Guru Technical Test

## Top 10 Certs

[kriteknetworks](#) [1,400]  
[sworseybuck](#) [1,400]  
[prye](#) [1,400]  
[kristiankrohn](#) [1,400]  
[klamtest](#) [1,400]  
[mhwarfield](#) [1,400]  
[brianewell](#) [1,337]  
[strehi](#) [1,230]  
[bmork](#) [1,192]  
[jhaprins](#) [1,188]

## Latest 10 Certs

[certTutor](#) [Guru]  
[miggy](#) [Enth]  
[leev](#) [Sage]  
[PayableOnDeath](#) [Enth]  
[netelichmooes](#) [Newb]

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>
```

## Sage

Now for the last step. We need to validate that you have IPv6 glue at the registrar for your domain name.

- Setup IPv6 Glue Host records with your registrar.
- When you are ready click [this link](#).

That's it! Good LUCK!

## SERVICES

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

## v4 Exhaustion

### IPv4 & IPv6 Statistics

v4 Addresses  
469,285,428 ↓

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  
1,539,592 ↑

679

Days

HURRICANE ELECTRIC  
INTERNET SERVICES



# Sage Test Page

## Account Menu

[Click For Main Page](#)

- [Update Info](#)
- [Top Scores](#)
- [Submit a Blog](#)
- [Review Blogs](#)
- [Trace for more points!](#)
- [DIG AAAA for more points!](#)
- [DIG PTR for more points!](#)
- [Ping6 for more points!](#)
- [IPv6 Whois for more points!](#)
- [Logout](#)

## IPv6 Glue Test

This test will check to see if the domain you enter below's nameserver have IPv6 glue at the registrar. Whatever you enter has to be a substring of the domains you have already used for previous tests which are:

Submit

## Quick Links

- [Certification](#)
- [Tunnelbroker](#)
- [Forums](#)
- [IPv6 Blog Posts](#)
- [Usage Statistics](#)
- [Network Map](#)
- [Looking Glass \(v4/v6\)](#)
- [Route Server \(telnet\)](#)
- [Global IPv6 Report](#)
- [IPv6 BGP View](#)

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- [Guru Technical Test](#)

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- [kristiankrohn](#) [1,400]
- [mhwarfield](#) [1,400]
- [kriteknetworks](#) [1,400]
- [klamtest](#) [1,400]

## Services

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

## v4 Exhaustion

IPv4 & IPv6 Statistics

v4 Addresses  
469,285,277 ↓

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



# Sage Test Page

## Account Menu

### Click For Main Page

[Update Info](#)  
[Top Scores](#)  
[Submit a Blog](#)  
[Review Blogs](#)  
[Trace for more points!](#)  
[DIG AAAA for more points!](#)  
[DIG PTR for more points!](#)  
[Ping6 for more points!](#)  
[IPv6 Whois for more points!](#)  
[Logout](#)

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## Top 10 Certs

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[prye](#) [1,400]  
[sworseybuck](#) [1,400]  
[kriteknetworks](#) [1,400]

## IPv6 Glue Test

This test will check to see if the domain you enter below's nameserver have IPv6 glue at the registrar. Whatever you enter has to be a substring of the domains you have already used for previous tests which are:

Domain:   
Domains TLD: com

NS Records:   
-TLD: net  
-Server: d.gtld-servers.net.  
-Output:   
**Success!**

-Server: h.gtld-servers.net.  
-Server: c.gtld-servers.net.  
-Server: f.gtld-servers.net.  
-Server: l.gtld-servers.net.  
-Server: a.gtld-servers.net.  
-Server: g.gtld-servers.net.  
-Server: k.gtld-servers.net.  
-Server: e.gtld-servers.net.  
-Server: i.gtld-servers.net.  
-Server: m.gtld-servers.net.  
-Server: j.gtld-servers.net.  
-Server: b.gtld-servers.net.

## Quick Links

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## Services

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

## v4 Exhaustion

IPv4 &  
IPv6  
Statistics  
v4 Addresses  
469,285,046 ↓



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# Troubleshoot Method

- Use the following dig commands to see whether your nameserver have IPv6 glue record

```
:~$ dig ns $domain +trace
```

```
:~$ dig AAAA $ns @tld_server
```





# Q&A



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## Contact:

IPv6 Certification Team  
Hurricane Electric  
760 Mission Court  
Fremont, CA 94539, USA  
<http://ipv6.he.net/certification>  
ipv6 at he dot net  
+1 (510) 580 4100