Community DNS

The longtime leader in providing unprecedented levels of security and capacity. From day one CommunityDNS has always ensured resilience through incorporating exceedingly-high levels of security and efficiency into its platform design. Being early implementers of DNSSEC, IPv6 and IDNs has allowed CommunityDNS to provide advice and guidance to its customers, providing operational experience for such important Internet initiatives.

IPv6

Understanding the importance of a dynamic Internet, CommunityDNS is fully IPv6 compliant.

 Native IPv6 and IPv4 anycast provisioning with years of experience.

IDNs

Understanding the need to extend the Internet's reach to a broader audience, CommunityDNS realized the importance of IDNs prior to IDN specification ratification.

- IDN methodology incorporated throughout CommunityDNS' network in 2003.
- Well ahead in operational experience in providing IDN resolution services for second level as well as top level TLDs.

New gTLD?

Are you looking for a new gTLD?

 Your DNS requirement and ICANN compliance needs are handled and exceeded. Are you ready? We are!

DNSSEC

Bringing skill and operational DNSSEC experience to the DNS community. Because of the malicious community's work in cache poisoning, the development and rollout of DNSSEC (DNS SECurity) is necessary. CommunityDNS was early students and early adopters, bringing skill and operational experience in DNSSEC to the DNS community.

- Complete DNSSEC signing as a service.
- Comprehensive zone signing tool compatible with CommunityDNS, BIND and NSD platforms.
- Lead DNSSEC testbeds with TLDs in 2004, 2005 and 2007.
- NSEC compliance with platform's initial design; becoming NSEC3 and NSEC3 with OptOut compliant in 2008.
- Experienced in signing zones for domain names and TLDs/ccTLDs.
- Currently supporting in excess of 3,500 zones.
- Our performance easily exceeds BIND and NSD in handling small to very large unsigned and signed zones.

CommunityDNS Ltd

Offices in the US, UK and Japan

Head Office

Bath University Innovation Centre Carpenter House, Broad Quay Bath, BA1 1UD United Kingdom

Email: BizDev@CommunityDNS.net **Comments:** FeedBack@CommunityDNS.net



Security. Speed. Resilience.

Your DNS needs:

- Is security of DNS important to you?
- Is capacity in the DNS important to you?
- Is resilience of the DNS important to you?
- Is disaster mitigation/recovery of importance to you?
- Would you like a DNS provider operationally experienced in IPv6, IDNs and DNSSEC?
- Are you interested in a DNS provider who is experienced in leading the way in operational capacity?

If you answered "Yes" to any of the above questions, CommunityDNS is the network for you and here is why:

CommunityDNS is the leading global anycast DNS network Engineered for Security, Optimized for Speed and Designed for Resilience.

http://CommunityDNS.net



Security

Anchored in Security

A network engineered around security is one of the three foundational keys towards resilience.

- Greater levels of security over BIND and NSD.
- OS, data and network individually encrypted throughout.
- All stored data is encrypted.
- Impossible for outbound zone transfer.
- Unequalled levels of security aid your disaster mitigation / recovery plans.
- Hardened operating system and custom built secure application software.

For Your Disaster Mitigation Initiatives

CommunityDNS understands the importance and value of a well-crafted and tested disaster mitigation / recovery plan. CommunityDNS' capabilities can assist with your organization's disaster mitigation / recovery plans.

- No operator overrides allowed for majorly-flawed zones — preventing outages whether by accident, disgruntled employee or hacker.
- Hidden masters with failover capability spanning multiple continents.
- Live and overnight backups mirrored across multiple continents.
- Fresh reload of full zone handled at 1 million names per minute.

Capacity

Longtime Leaders

"Speed" is the unspoken word in DNS capacity. The initial design of CommunityDNS' nodes was optimized for speed; providing the second foundational element to CommunityDNS' success.

- Each node comfortably handles over 863,000 queries per second
- Faster than Oracle's fastest Berkeley database, the database on each node operates over 11 times faster on reads and close to 4 times faster on writes at 11,000,000 transactions per second
- On an average day, the network supports over 20Gb per second traffic inbound and 50Gb per second of traffic outbound
- Easily exceeds BIND and NSD in handling unsigned and signed zones from small to very large
- Tested up to 1,000,000 updates per day
- Can handle bursts of up to 100,000 updates per second
- Tested to support 500,000,000 domain names



August, 2010, CommunityDNS' Hong Kong node experienced 2 hour traffic spike. This node comfortably handled over 863,000 queries per second.

Resilience

Designed for Resilience

Economies, enterprises and users depend on the internet. Resilience of the DNS is important. The third foundational element towards CommunityDNS' success is creating a network designed for resilience.

- Over 40 anycast nodes distributed globally
- Comprised of six anycast clouds
- Platform efficiency and speed handles traffic volumes where other platforms have failed
- 100% uptime since 1996
- CommunityDNS has handled 53% more queries during major attacks as customer's other DNS providers are unable to handle the load, thus resolvers automatically switching more traffic to CommunityDNS
- Clustering incorporated in initial design
- Designed to scale to thousands of nodes with little overhead



CommunityDNS brings resilience through six anycast networks with over 40 nodes spanning 5 continents.