



Supported RFCs:

Nixu NameSurfer™ Suite 6 Series

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As a basic principle of design, Nixu NameSurfer takes the RFCs into account as fully as possible. This is not always easy as the relevant RFCs don't always agree with each other completely. We follow these principles in how and when we implement a new Internet Draft, RFC or standard:

- Every standard and RFC that is clear and not in conflict with any other standard or RFC or with itself is implemented as-is
- If there are conflicts, but there nevertheless is a clear industry standard, we implement the industry standard
- Every Internet Draft which can clearly be identified as an industry standard to be, and which is not in conflict with any RFCs or standards, will be implemented

Nixu NameSurfer implements the functionality of a primary name server as defined in RFC1034 and RFC1035, and fully supports all resource record types defined in those documents. It relies on BIND to provide secondary name service, caching/recursive name service, and resolver functionality.

We have so far implemented the following key RFCs. (Version 6.1.x)

DNS Standards					
#	Author	Name	Date	Status	Comments
1034	P.V. Mockapetris	Domain names - concepts and facilities	November 1987	STANDARD	<p>Obsoletes RFC973, RFC882, RFC883</p> <p>Updated by RFC1101, RFC1183, RFC1348, RFC1876, RFC1982, RFC2065, RFC2181, RFC2308, RFC2535, RFC4033, RFC4034, RFC4035, RFC4343, RFC4035, RFC4592 Errata</p>
1035	P.V. Mockapetris	Domain names - implementation and specification	November 1987	STANDARD	<p>Obsoletes RFC973, RFC882, RFC883</p> <p>Updated by RFC1101, RFC1183, RFC1348, RFC1876, RFC1982, RFC2065, RFC2181, RFC2308, RFC2535, RFC4033, RFC4034, RFC4035, RFC4343, RFC4035, RFC4592 Errata</p>
1183	E R. Ullman, P. Mockapetris, L. Mamakos, C. Everhart	New DNS RR Definitions	October 1990	EXPERIMENTAL	<p>The AFS, RP, X25, ISDN, and RT resource record types of RFC1183 are all supported. Updates RFC1034, RFC1035</p>
1706	I B. Manning, R. Colella	DNS NSAP Resource records	October 1994	INFORMATIONAL	<p>Obsoletes RFC1637</p> <p>The NSAP resource record type is supported.</p>
1982	PS R. Elz, R. Bush	Serial Number Arithmetic	September 1996	PROPOSED STANDARD	<p>Updates RFC1034 and 1035. Serial number arithmetic is implemented in accordance with RFC1982.</p>

#	Author	Name	Date	Status	Comments
1996	PS P. Vixie	A Mechanism for Prompt Notification of Zone Changes (DNS NOTIFY)	August 1996	PROPOSED STANDARD	Updates RFC1035. Nixu NameSurfer notifies secondaries of changes to primary zone data using the RFC1996 notification protocol. Notification messages are transported over TCP
1912	D. Barr	Common DNS Operational and Configuration Errors	February 1996	INFORMATIONAL	Obsoletes RFC1537
2782	A. Gulbrandsen, P. Vixie, L. Esibov	A DNS RR for specifying the location of services (DNS SRV)	February 2000	PROPOSED STANDARD	Obsoletes RFC 2052 SRV RR is Supported.
2136	P. Vixie, S. Thomson, Y. Rekhter, J. Bound	Dynamic Updates in the Domain Name System (DNS UPDATE)	April 1997	PROPOSED STANDARD	Updates RFC1035, Updated by RFC3007, RFC4035, RFC4033, RFC4034
3007	B. Wellington	Secure Domain Name System (DNS) Dynamic Update	November 2000	PROPOSED STANDARD	Obsoletes RFC2137 Updates RFC2535, RFC2136, Updated by RFC4033, RFC4034, RFC4035
2845	P. Vixie, O. Gudmundsson, D. Eastlake 3rd, B. Wellington	Secret Key Transaction Authentication for DNS (TSIG)	May 2000	PROPOSED STANDARD	Statically configured transaction signatures are supported for Dynamic Updates and Zone transfers. Updates RFC1035, Updated by RFC3645
1876	C. Davis, P. Vixie, T. Goodwin, I. Dickinson	A Means for Expressing Location Information in the Domain Name System	January 1996	EXPERIMENTAL	LOC RR is supported. Updates RFC1034, RFC1035

#	Author	Name	Date	Status	Comments
1995	M. Ohta	Incremental Zone Transfers in DNS	August 1996	PROPOSED STANDARD	Incremental Zone Transfer server is implemented. Updates RFC1035
2671	P. Vixie	Extension Mechanisms for DNS (EDNS0)	August 1999	PROPOSED STANDARD	The server is able to accept EDNS0 (RFC2671) enabled requests and generate EDNS0 compatible answers.
2672	M. Crawford	Non-Terminal DNS Name Redirection	August 1999	PROPOSED STANDARD	Updated by RFC4592
2673	M. Crawford	Binary Labels in the Domain Name System	August 1999	PROPOSED STANDARD	Updated by RFC3363, RFC3364
3363	R. Bush, A. Durand, B. Fink, O. Gudmundsson, T. Hain	Representing Internet Protocol version 6 (IPv6) Addresses in the Domain Name System (DNS)	August 2002	INFORMATIONAL	Updates RFC2673, RFC2874
3364	R. Austein	Tradeoffs in Domain Name System (DNS) Support for Internet Protocol version 6 (IPv6)	August 2002	INFORMATIONAL	Updates RFC2673, RFC2874
2874	M. Crawford, C. Huitema	DNS Extensions to Support IPv6 Address Aggregation and Renumbering	July 2000	EXPERIMENTAL	A6, AAAA and DNAME RRs and Binary labels are supported. Automatic reverse mapping for A6 and AAAA records is implemented. Updates RFC1886, Updated by RFC3152, RFC3226, RFC3363, RFC3364
3226	O. Gudmundsson	DNSSEC and IPv6 A6 aware server/resolver message size requirements	December 2001	PROPOSED STANDARD	Updates RFC2535, RFC2874, Updated by RFC4033, RFC4034, RFC4035

#	Author	Name	Date	Status	Comments
2317	H. Eidnes	Classless IN-ADDR.ARPA delegation	March 1998	BEST CURRENT PRACTICE	Nixu NameSurfer fully supports creating RFC2317 style reverse delegations and records
3596	S. Thomson, C. Huitema, V. Ksinant, M. Souissi	DNS Extensions to support IP version 6	October 2003	DRAFT STANDARD	<p>Obsoletes RFC3152, RFC1886</p> <p>Nixu NameSurfer fully supports the use of IPv6 addresses. This includes both A6 and AAAA notation, and in both pure (IPv6 only) and mixed (IPv6 and IPv4) domains and zones.</p> <p>Delegation of IP6.ARPA In Nixu NameSurfer, IPv6 reverse records are automatically created as ip6.arpa.</p>
3402	M. Mealling	Dynamic Delegation Discovery System (DDDS) Part Three: The Domain Name System (DNS) Database	October 2002	PROPOSED STANDARD	Obsoletes RFC2915, RFC2168
3761	P. Faltstrom, M. Mealling	The E.164 to Uniform Resource Identifiers (URI) Dynamic Delegation Discovery System (DDDS) Application (ENUM)	April 2004	PROPOSED STANDARD	Obsoletes RFC2916
4592	E. Lewis	The Role of Wildcards in the Domain Name System	July 2006	PROPOSED STANDARD	Updates RFC1034, RFC2672 Errata

DNSSEC Standards (Experimental in 6.1.x)					
#	Author	Name	Date	Status	Comments
4033	R. Arends, R. Austein, M. Larson, D. Massey, S. Rose	DNS Security Introduction and Requirements	March 2005		Obsoletes RFC2535, RFC3008, RFC3090, RFC3445, RFC3655, RFC3658, RFC3755, RFC3757, RFC3845, Updates RFC1034, RFC1035, RFC2136, RFC2181, RFC2308, RFC3225, RFC3007, RFC3597, RFC3226
4034	R. Arends, R. Austein, M. Larson, D. Massey, S. Rose	Resource Records for the DNS Security Extensions	March 2005		Obsoletes RFC2535, RFC3008, RFC3090, RFC3445, RFC3655, RFC3658, RFC3755, RFC3757, RFC3845, Updates RFC1034, RFC1035, RFC2136, RFC2181, RFC2308, RFC3225, RFC3007, RFC3597, RFC3226, Updated by RFC4470 Errata
4035	R. Arends, R. Austein, M. Larson, D. Massey, S. Rose	Protocol Modifications for the DNS Security Extensions	March 2005		Obsoletes RFC2535, RFC3008, RFC3090, RFC3445, RFC3655, RFC3658, RFC3755, RFC3757, RFC3845, Updates RFC1034, RFC1035, RFC2136, RFC2181, RFC2308, RFC3225, RFC3007, RFC3597, RFC3226, Updated by RFC4470
4470	S. Weiler, J. Ihren	Minimally Covering NSEC Records and DNSSEC On-line Signing	April 2006		Updates RFC4035, RFC4034 Errata Not Implemented
3225	D. Conrad	Indicating Resolver Support of DNSSEC	December 2001		Updated by RFC4033, RFC4034, RFC4035

List of unsupported RFCs (in version 6.1.x)

#	Author	Name	Date	Status	Comments
3645	S. Kwan, P. Garg, J. Gilroy, L. Esibov, J. Westhead, R. Hall	Generic Security Service Algorithm for Secret Key Transaction Authentication for DNS (GSS-TSIG)	October 2003	PROPOSED STANDARD	Updates RFC2845
NameSurfer related RFCs (Not DNS)					
#	Author	Name	Date	Status	Comments
1945	T. Berners-Lee, R. Fielding, H. Nielsen	Hypertext Transfer Protocol - HTTP/1.0	May 1996	INFORMATIONAL	NameSurfer uses a HTTP/1.0 compatible web server for form-based editing of DNS/IPAM data.
2854	D. Connolly, L. Masinter	The 'text/html' Media Type	June 2000	INFORMATIONAL	Obsoleted by RFC2854 Errata Nixu NameSurfer allows administrators to upload data in RFC1035 master file format or /etc/hosts format from their web browsers by means of the RFC1867 form-based file upload mechanism.