

DNSSEC Management

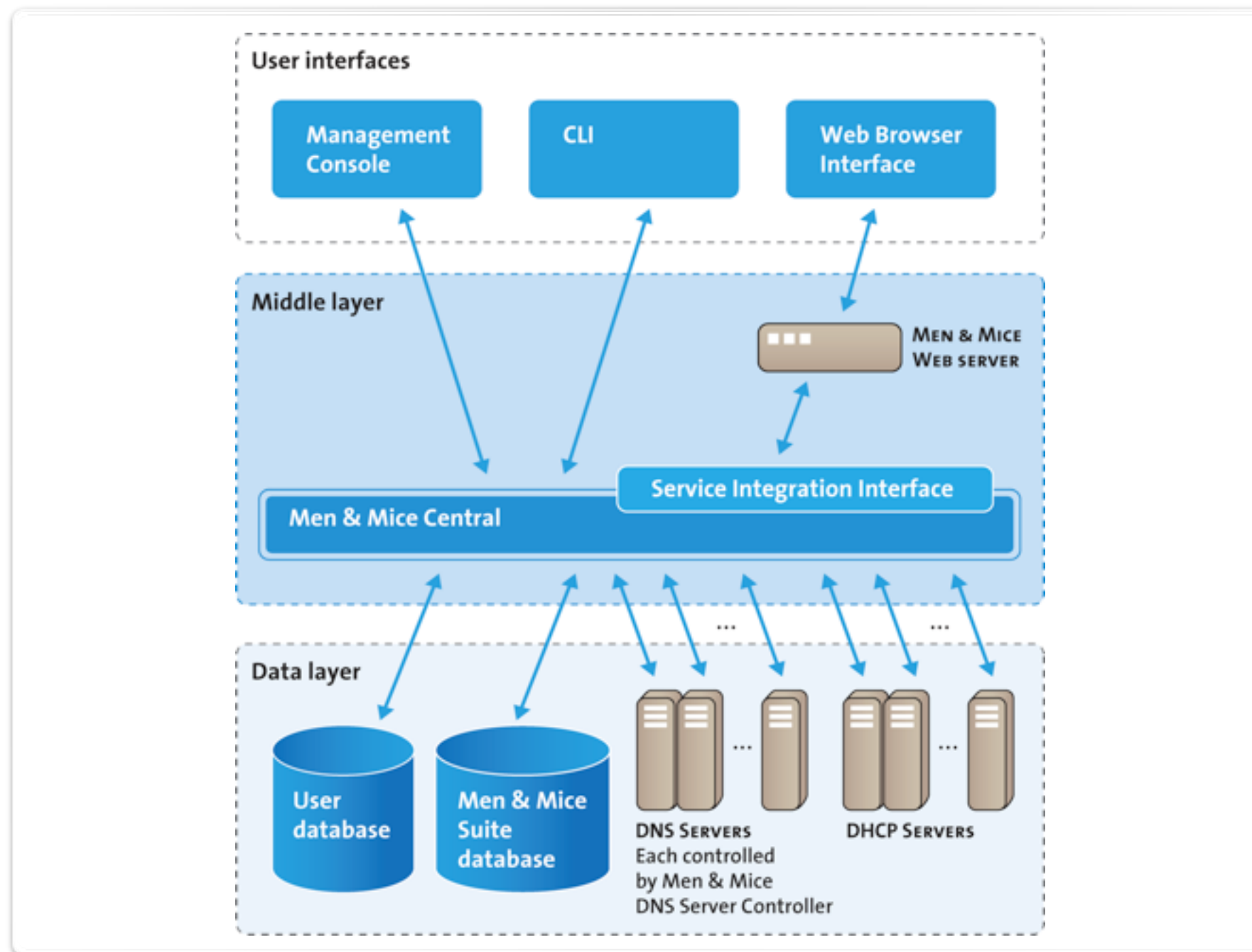
with Men & Mice Suite 6.1.1
and OpenDNSSEC

Agenda

- Of Men & Mice
- The Men & Mice Suite / IP Address Management solution
 - Architectural Overview
 - DNSSEC workflow
 - Men & Mice Benefits
- Live Demo

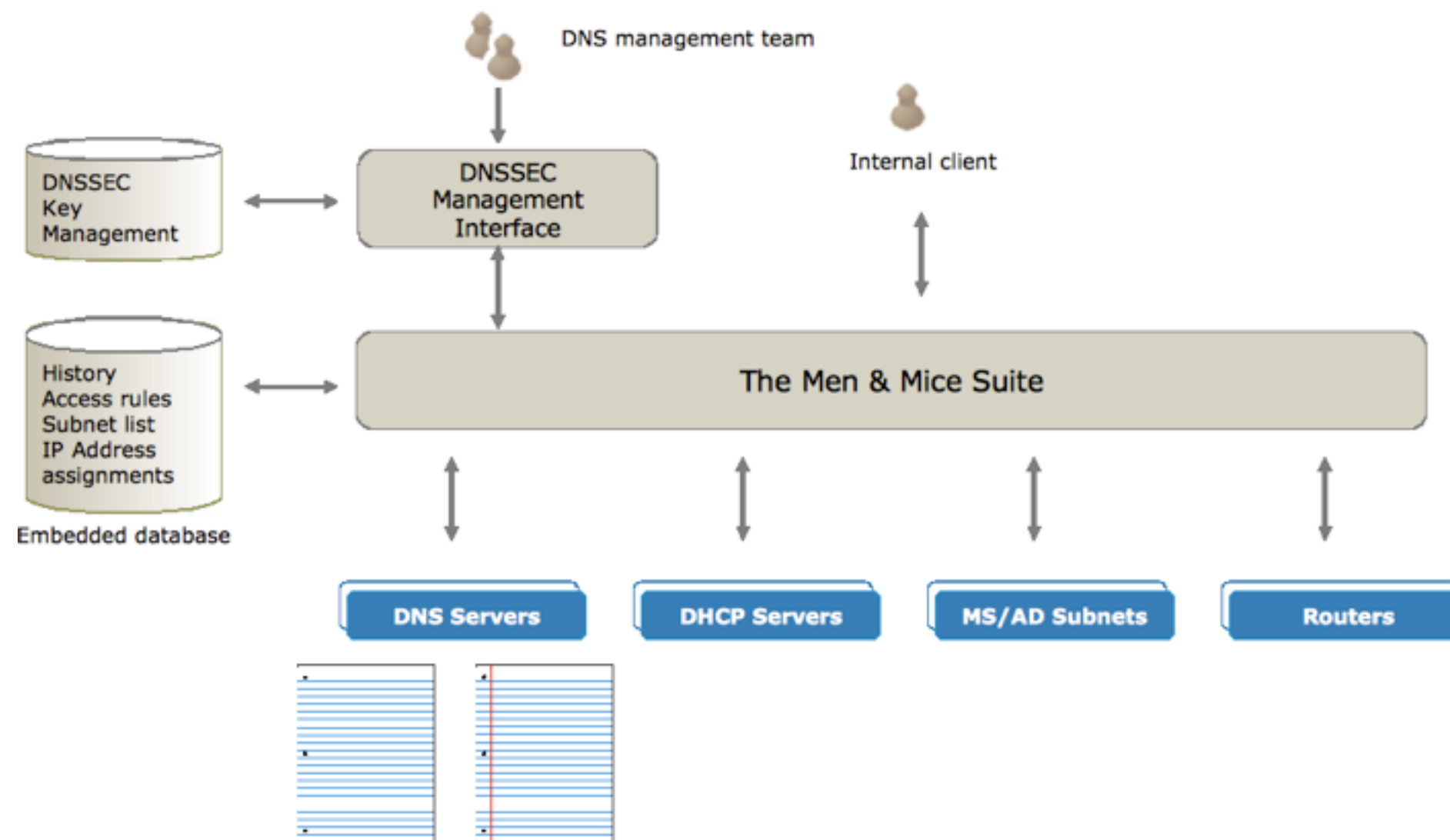
Of Men & Mice

- Icelandic company, founded 1990
- Focusing on DNS since 1994
- IP Address Management since 2000
- more than 10.000 customers worldwide



Men & Mice Suite – 3 tier architecture

Integration Layer of existing services



DNSSEC workflow



DNS Management
Team



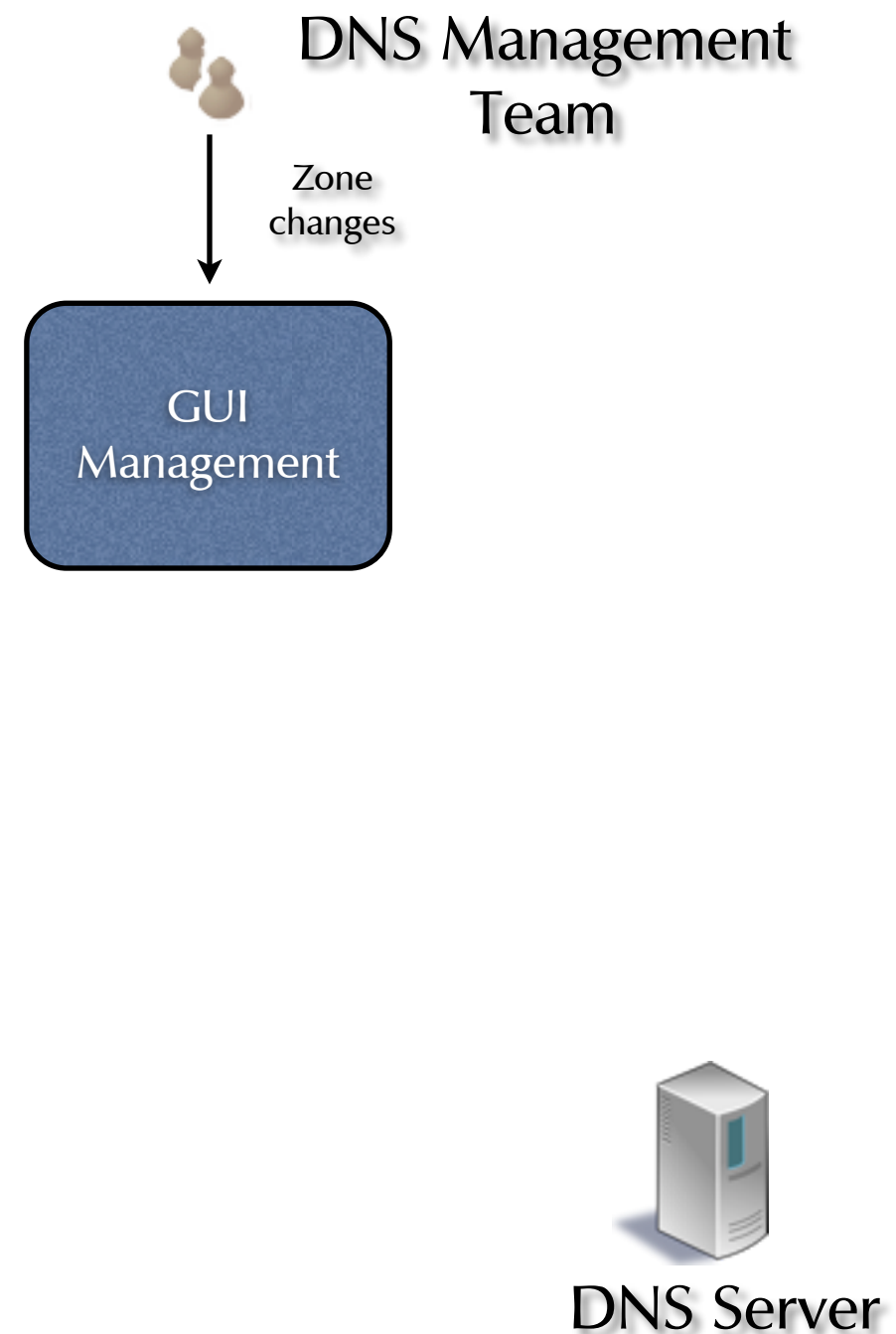
DNS Server

DNSSEC workflow

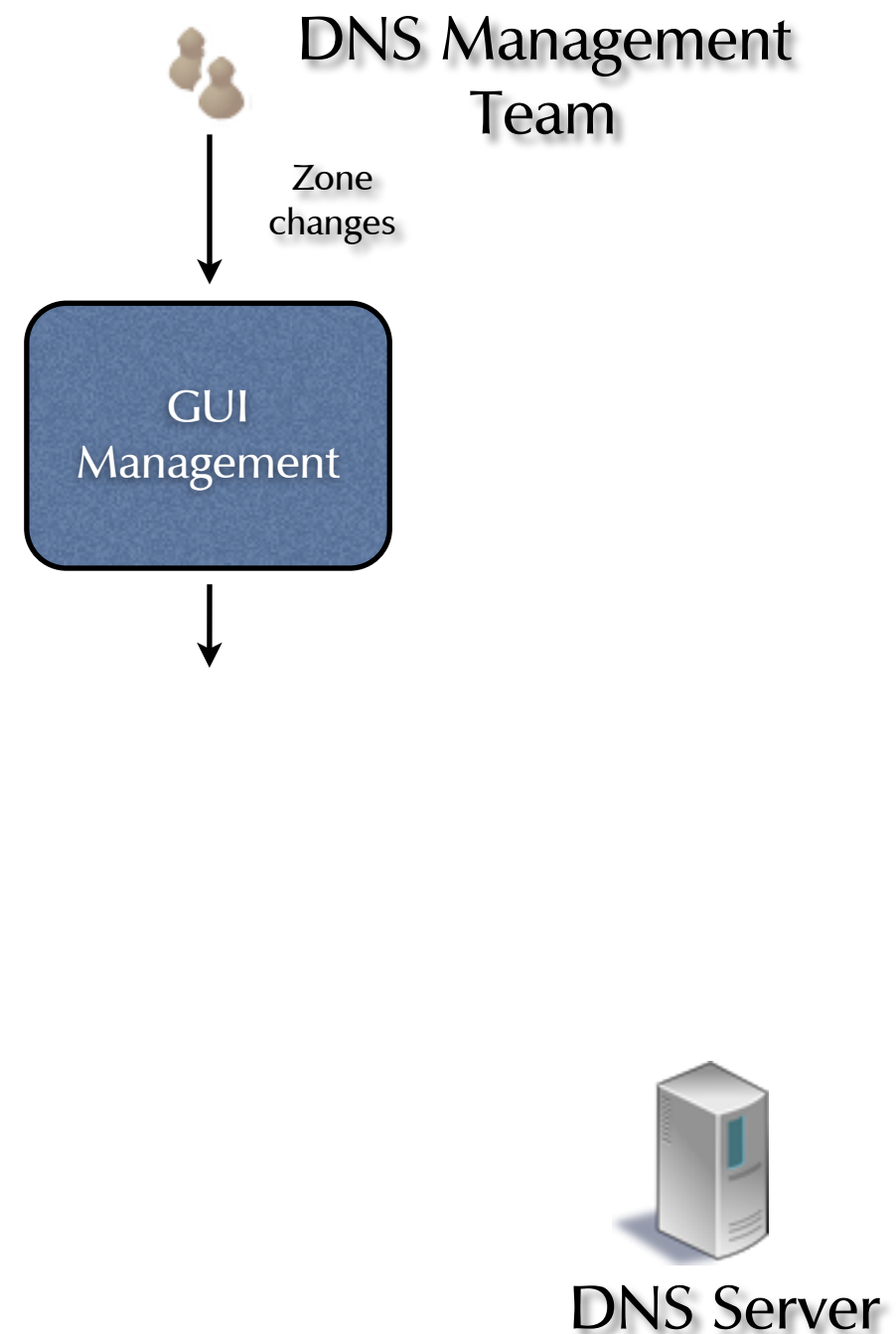


DNS Server

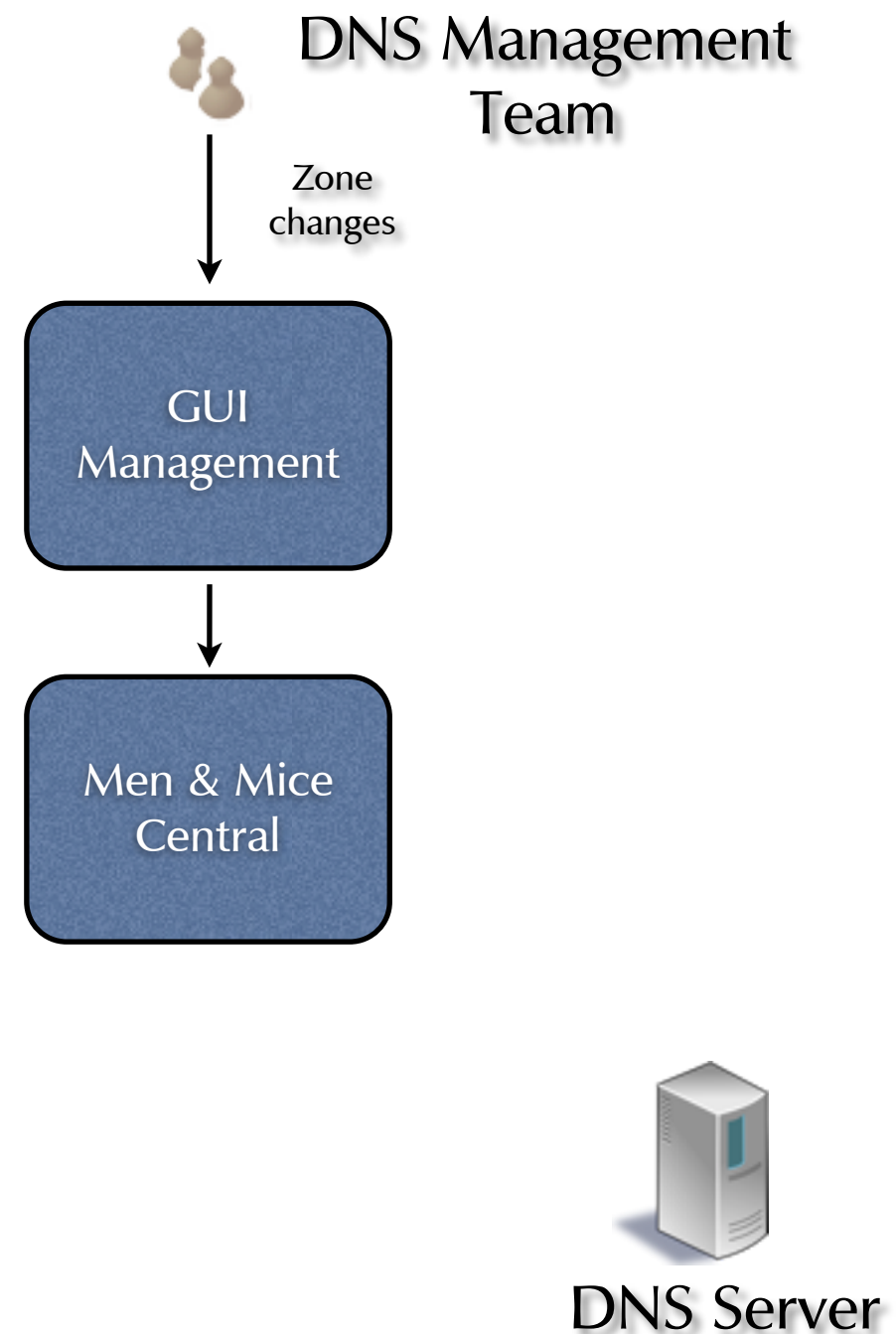
DNSSEC workflow



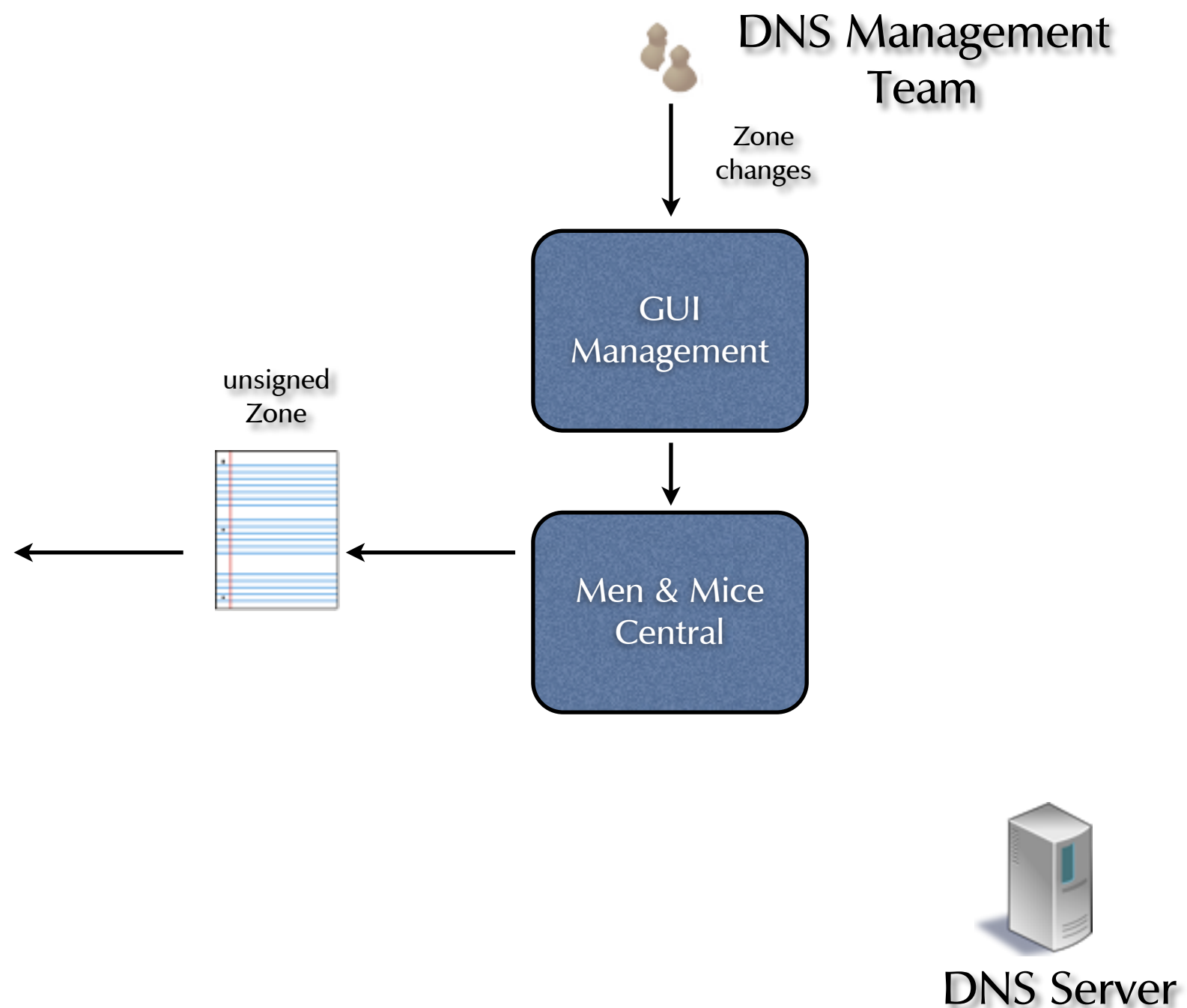
DNSSEC workflow



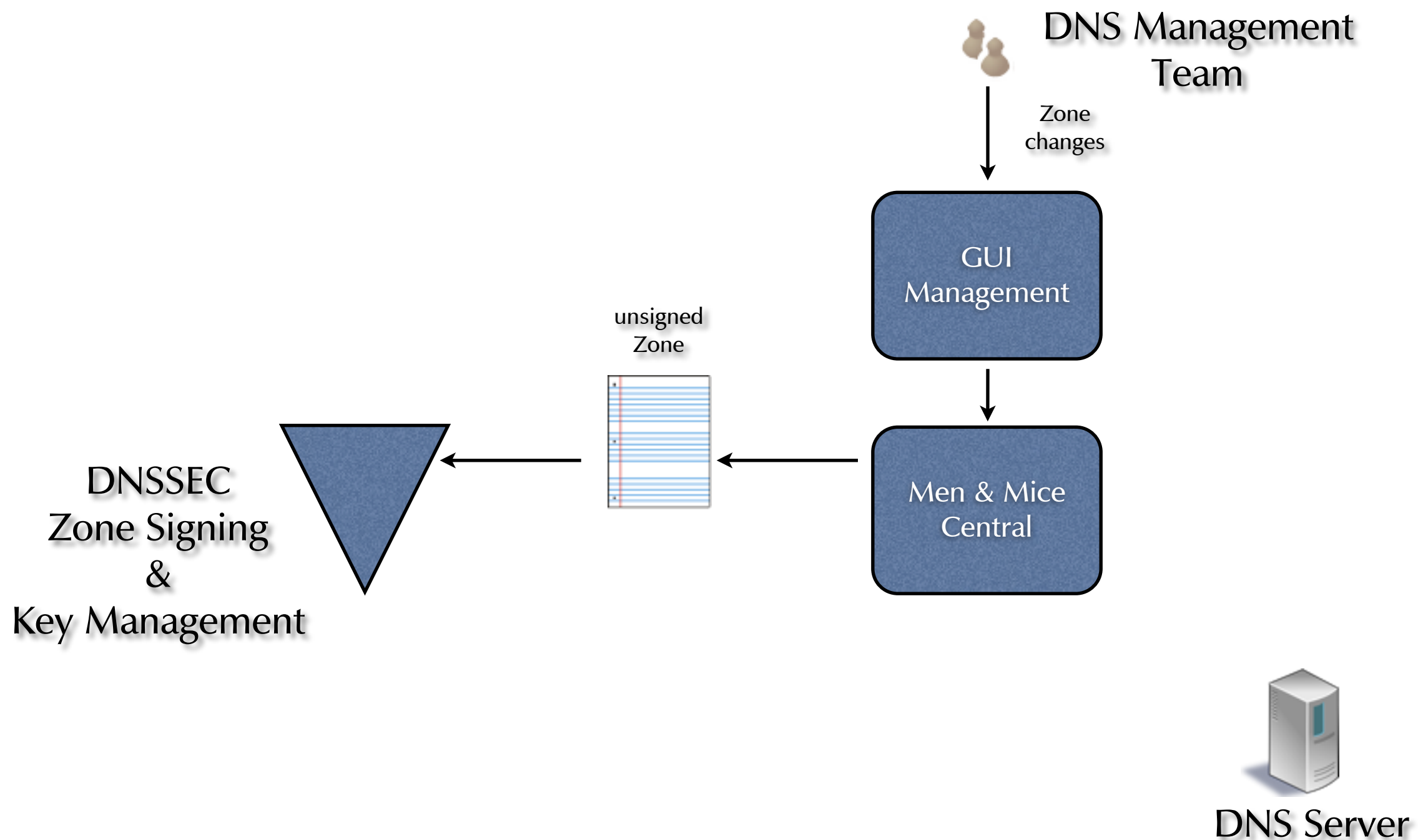
DNSSEC workflow



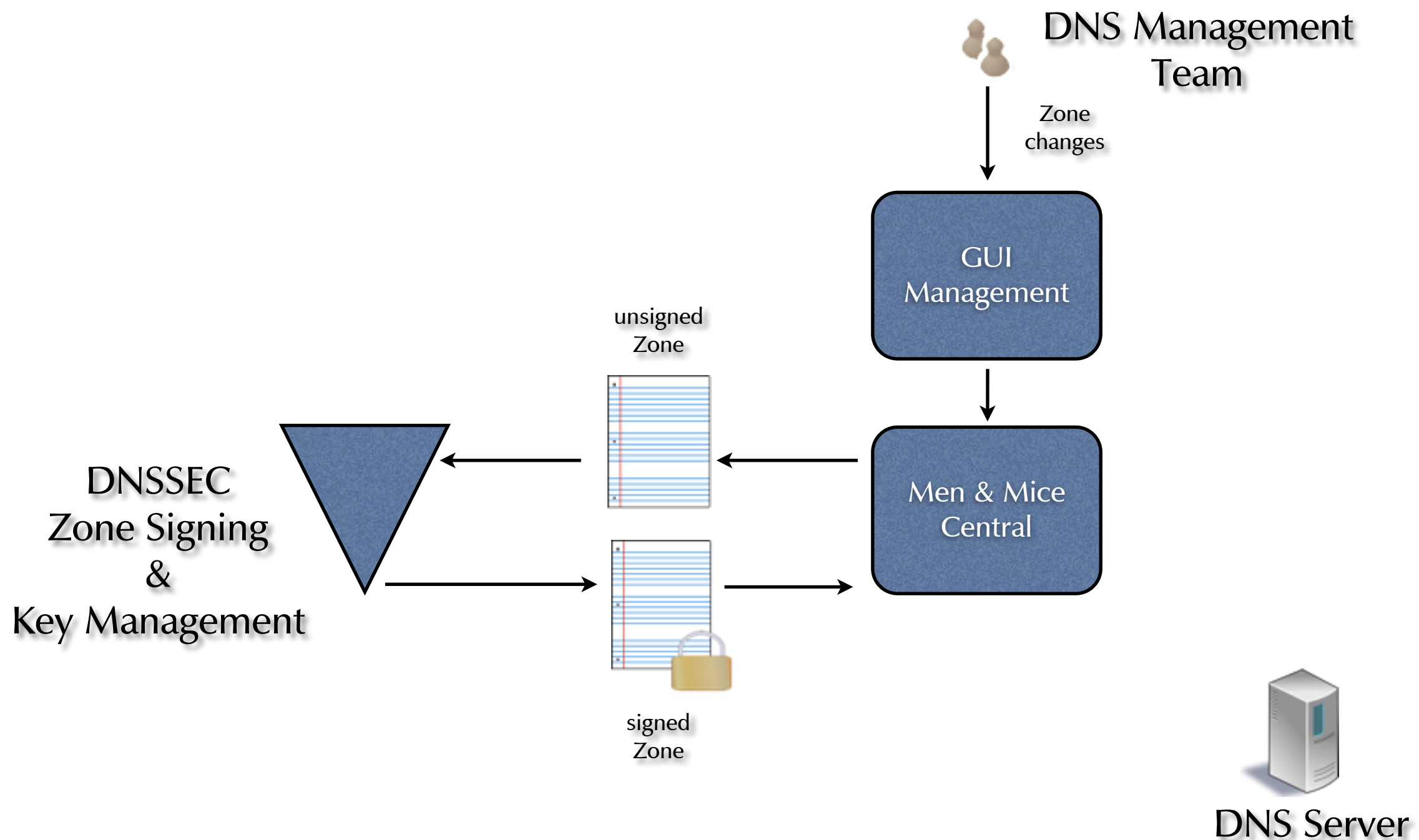
DNSSEC workflow



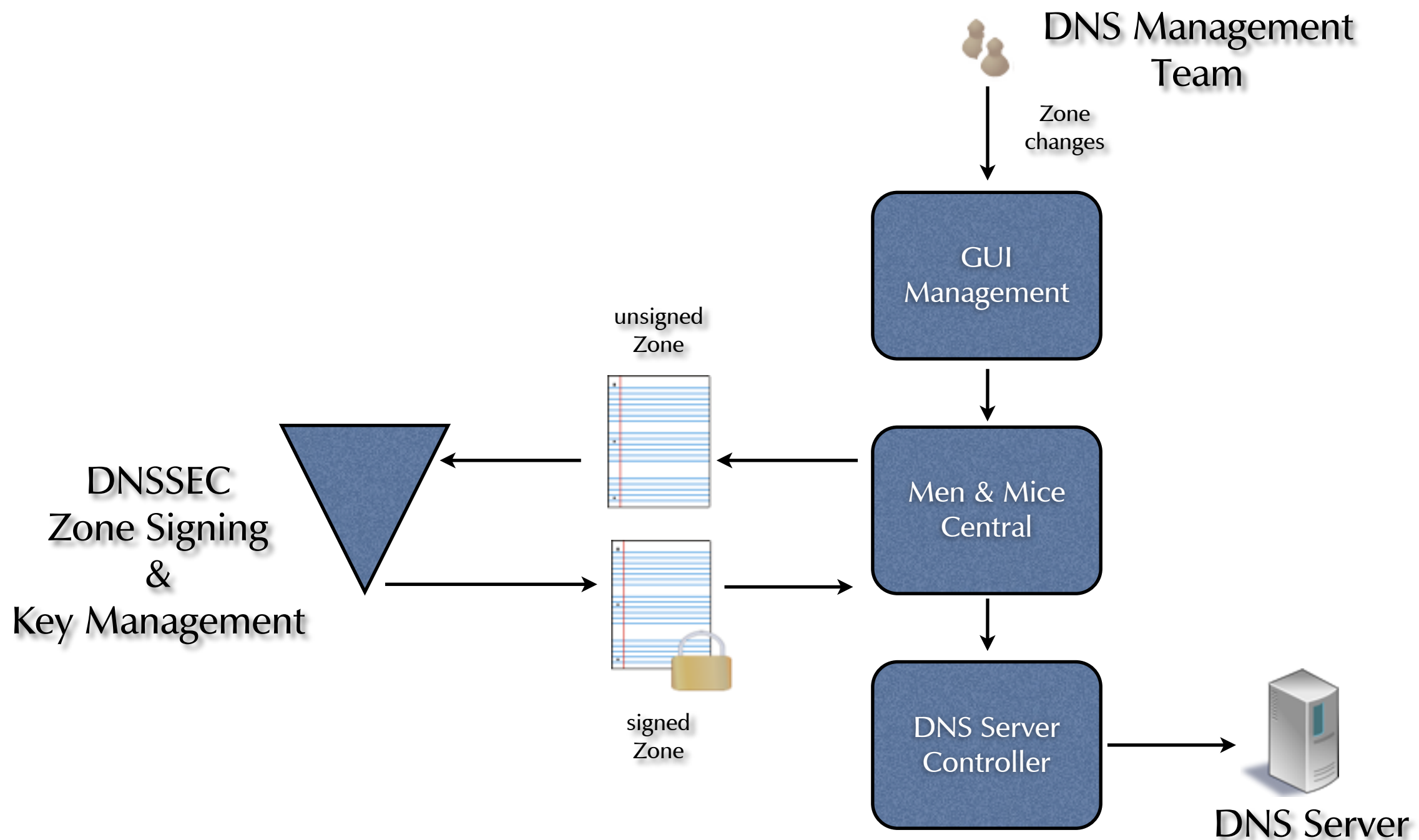
DNSSEC workflow



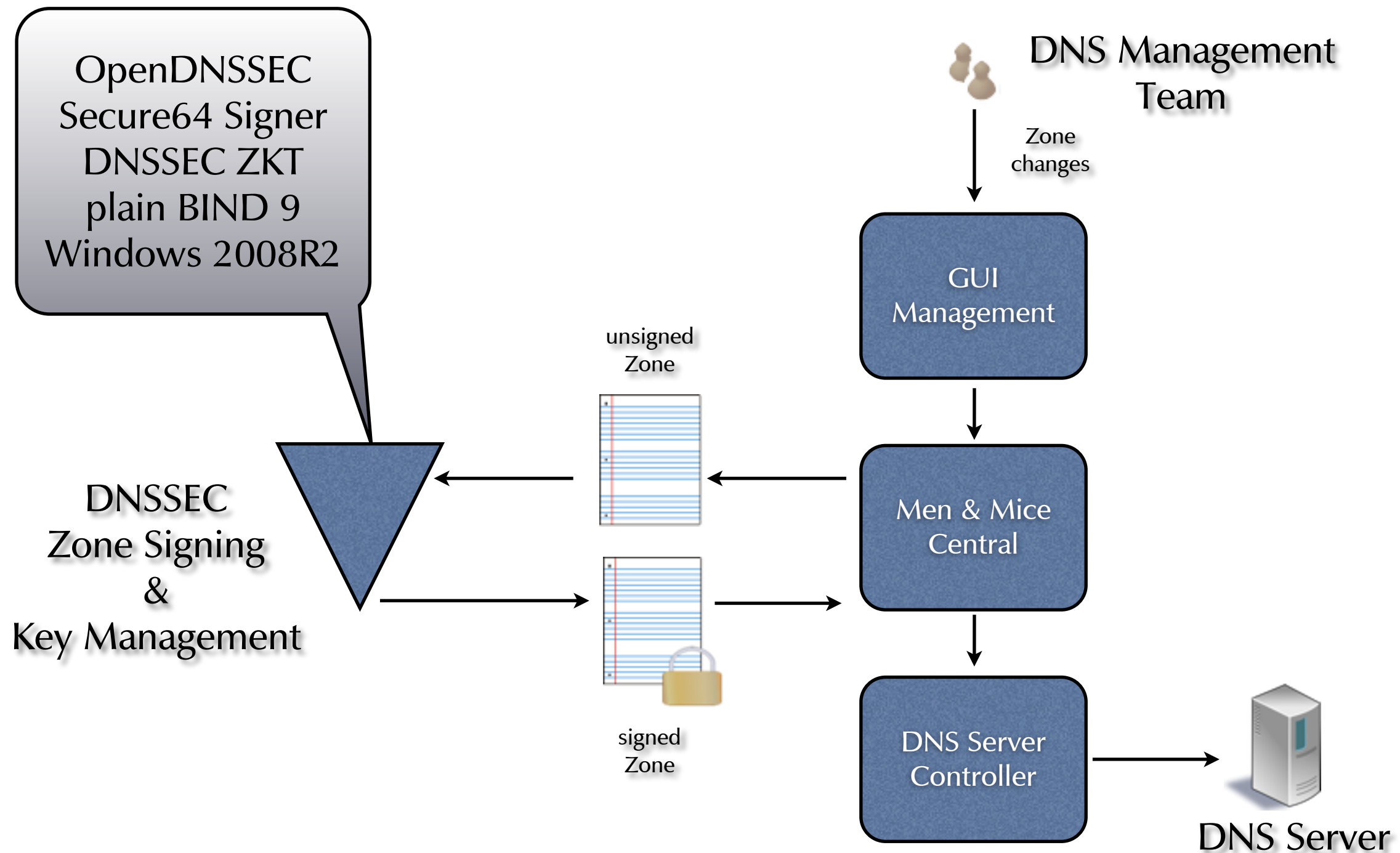
DNSSEC workflow



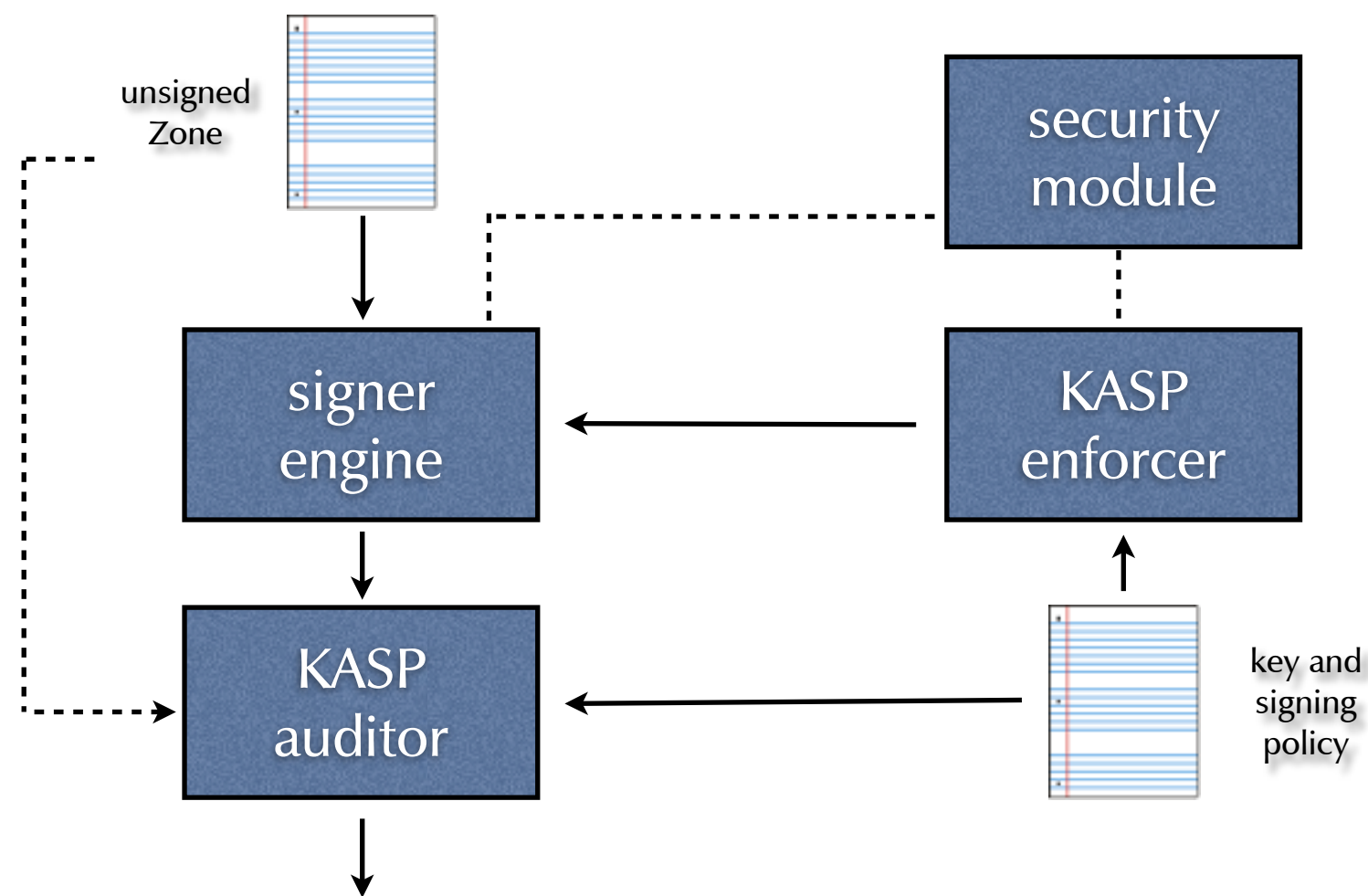
DNSSEC workflow



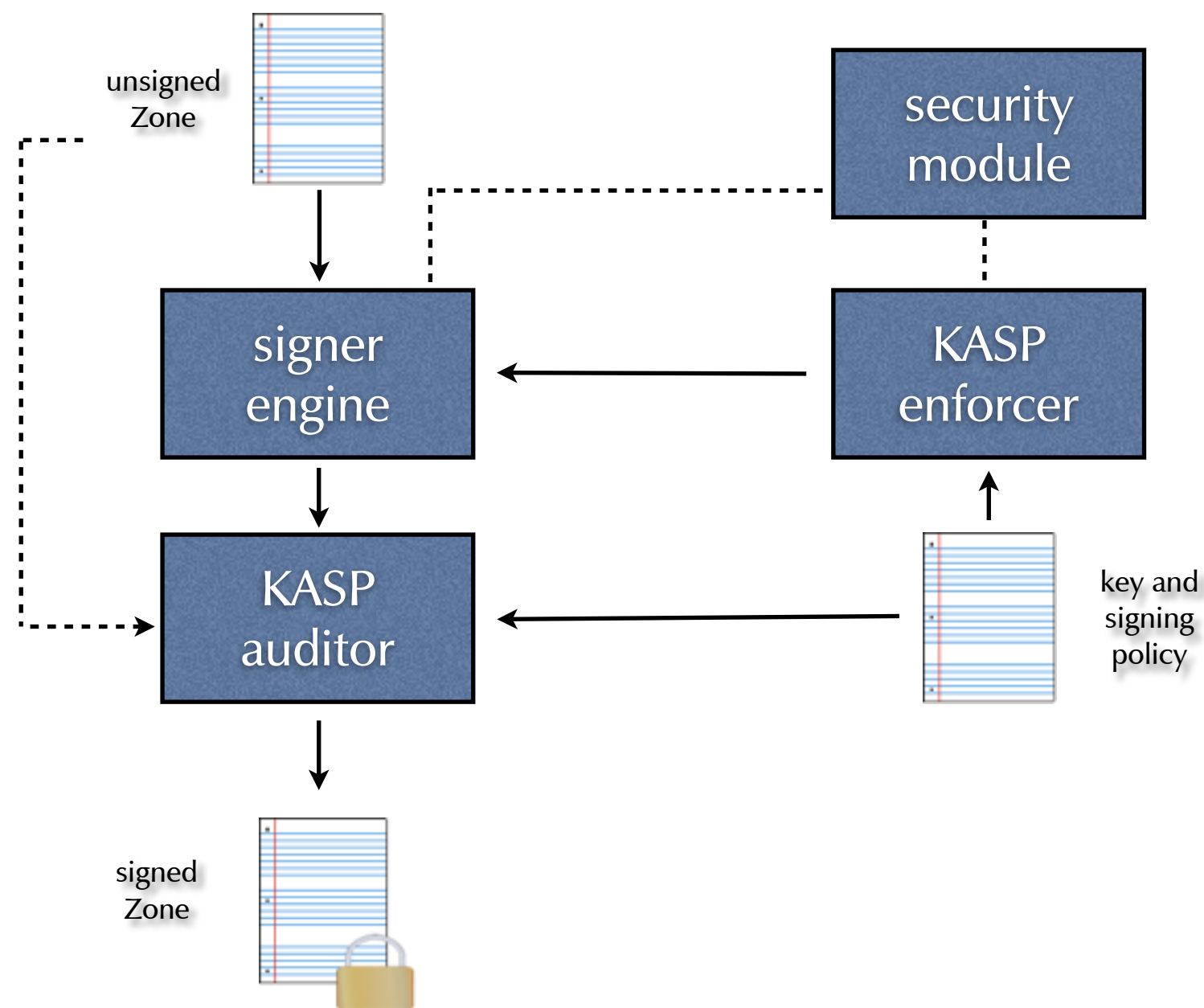
DNSSEC workflow



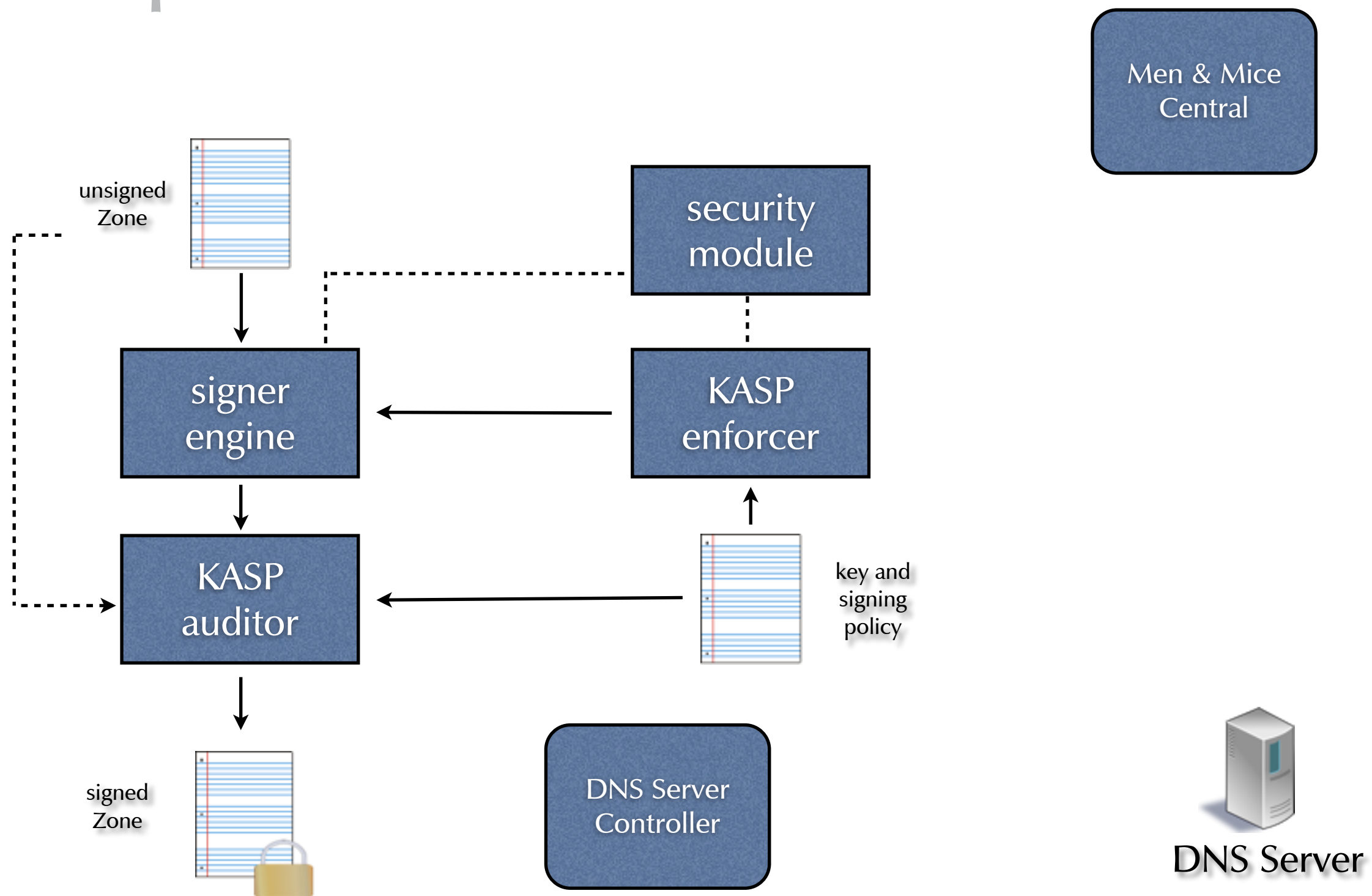
OpenDNSSEC



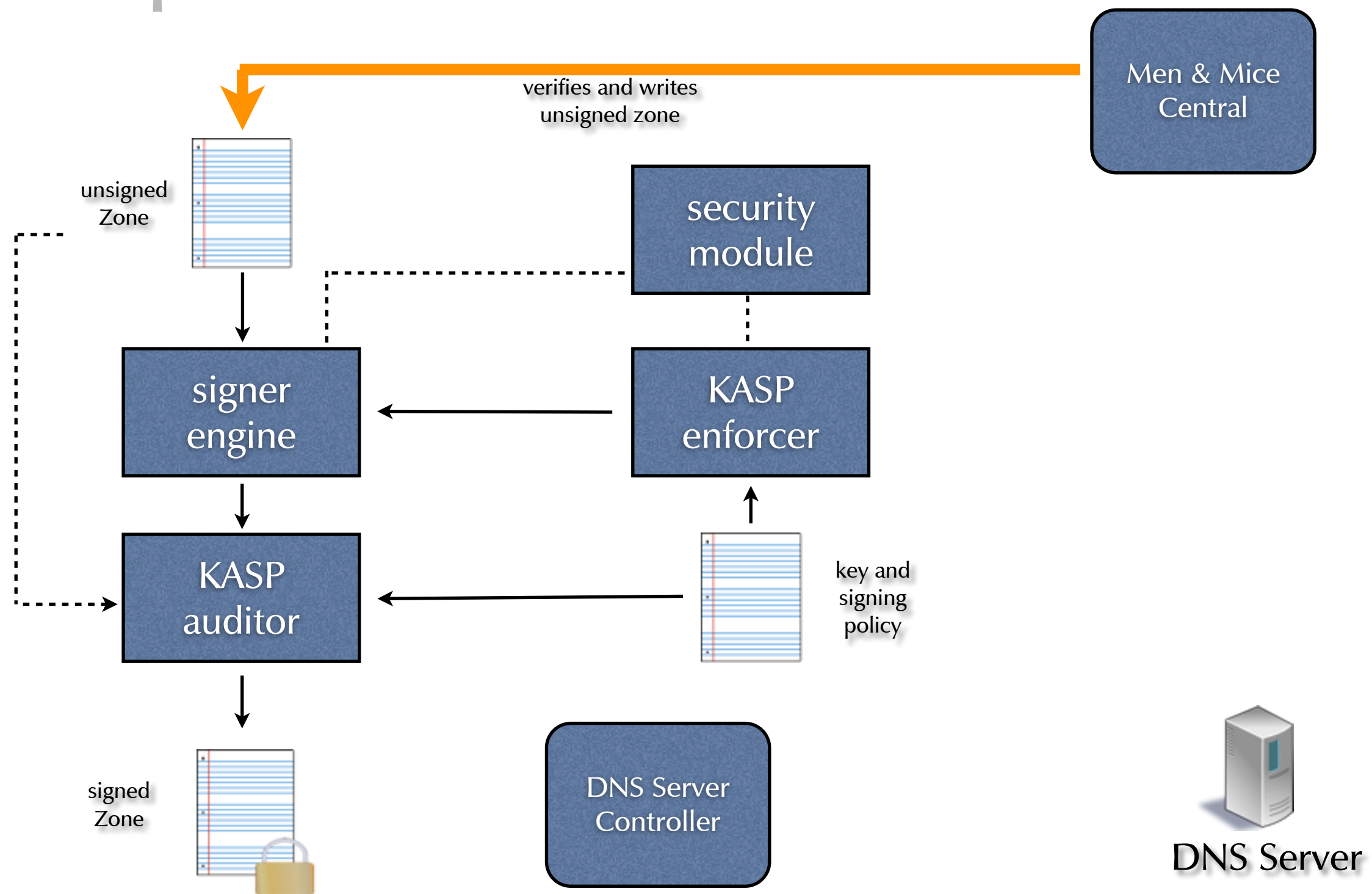
OpenDNSSEC



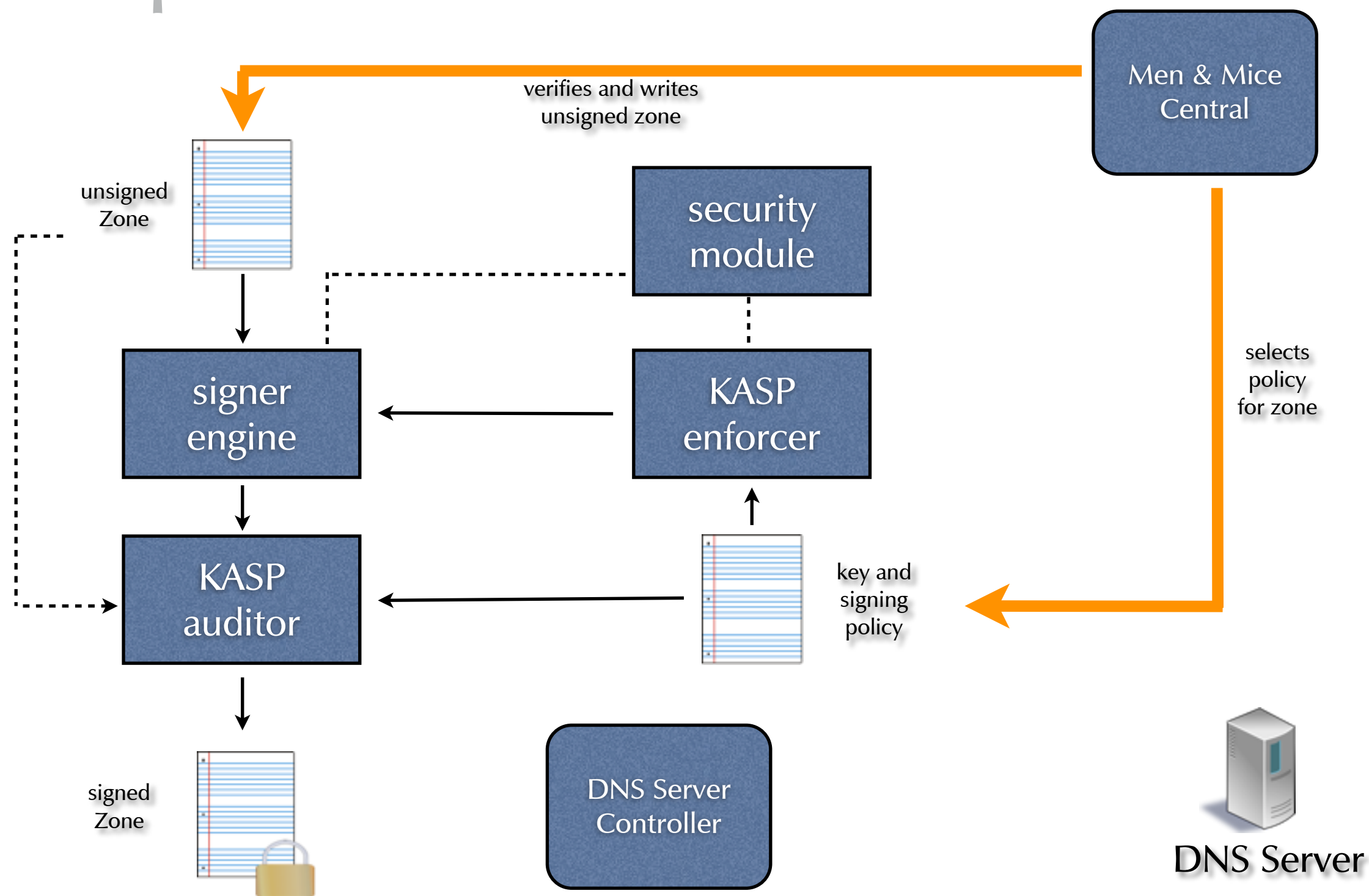
OpenDNSSEC + Men & Mice



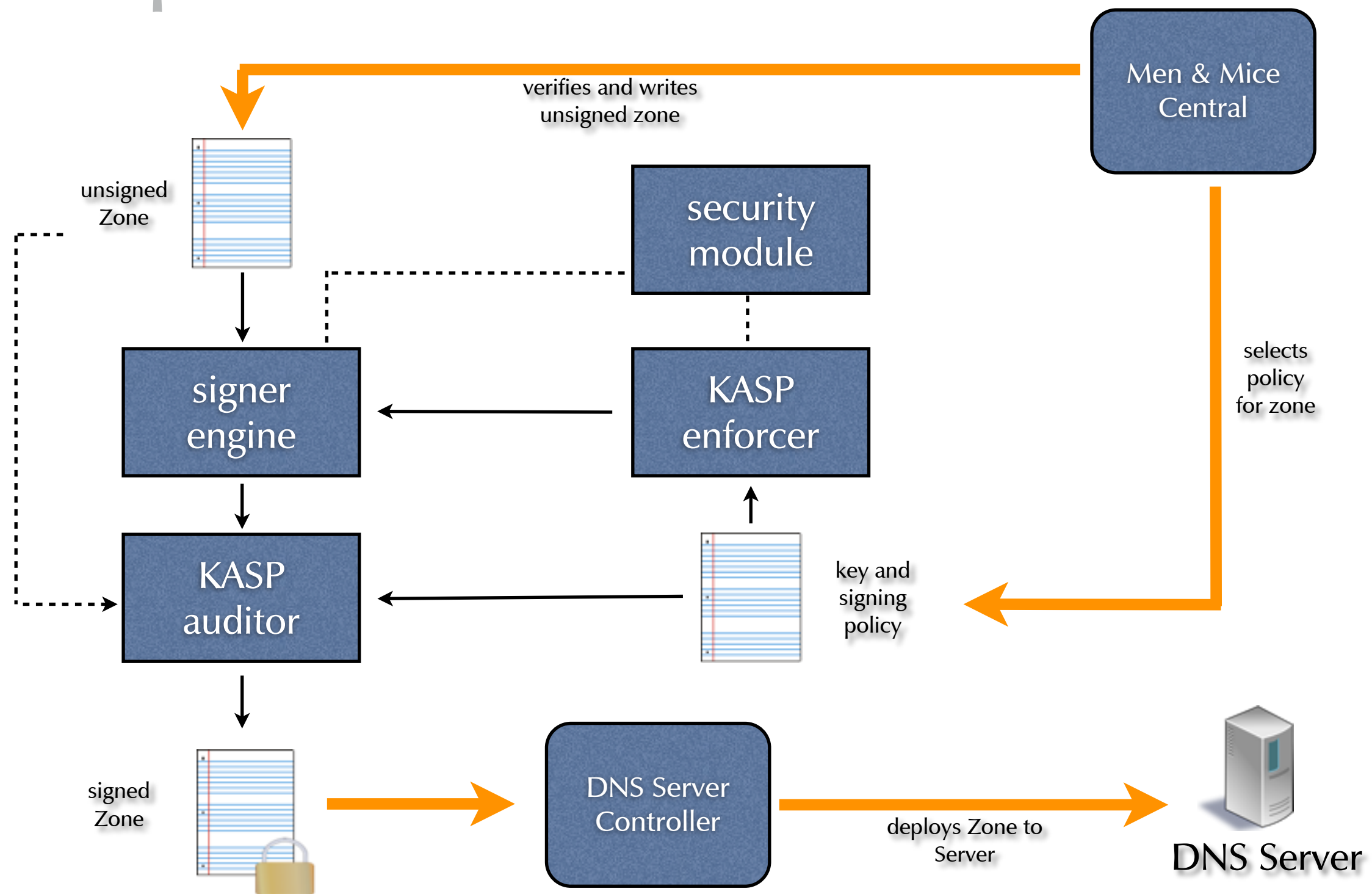
OpenDNSSEC + Men & Mice



OpenDNSSEC + Men & Mice



OpenDNSSEC + Men & Mice



Men & Mice Management Console - [Manager]

File Edit Tools Query Zone Window Help

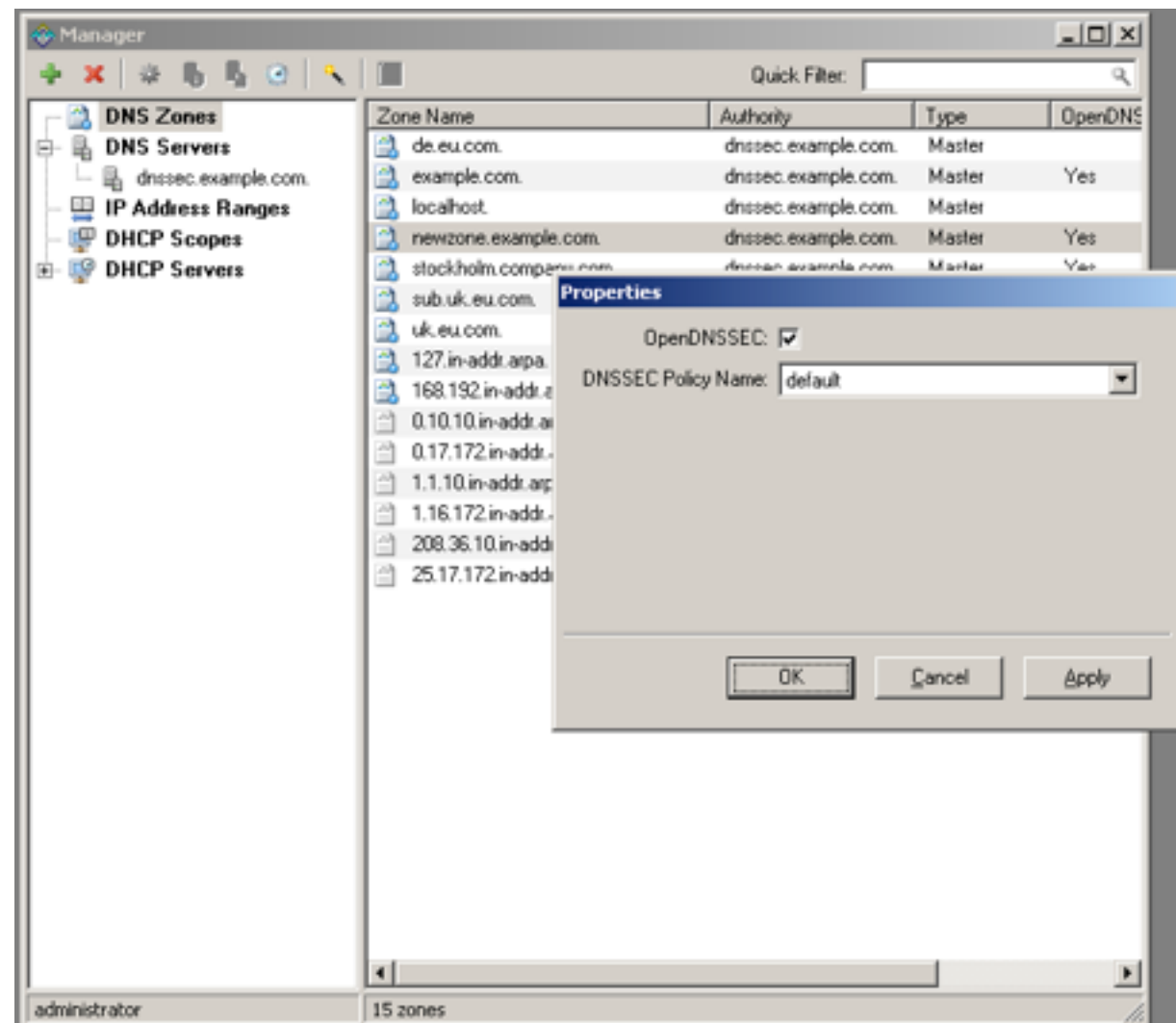
Quick Filter:

Zone Name	Authority	Type	OpenDNSSEC	DNSSEC Policy ...
de.eu.com.	dnssec.example.com.	Master		
example.com.	dnssec.example.com.	Master	Yes	default
localhost.	dnssec.example.com.	Master		
newzone.example.com.	dnssec.example.com.	Master	Yes	default
stockholm.company.com.	dnssec.example.com.	Master	Yes	default
sub.uk.eu.com.	dnssec.example.com.	Master	Yes	default
uk.eu.com.	dnssec.example.com.	Master - Se...	Yes	default
127.in-addr.arpa.	dnssec.example.com.	Master		
168.192.in-addr.arpa.	dnssec.example.com.	Master		
0.10.10.in-addr.arpa.	N/A	Slave		
0.17.172.in-addr.arpa.	N/A	Slave		
1.1.10.in-addr.arpa.	N/A	Slave		
1.16.172.in-addr.arpa.	N/A	Slave		
208.36.10.in-addr.arpa.	N/A	Slave		
25.17.172.in-addr.arpa.	N/A	Slave		

administrator 15 zones

csmobile2

Zone List



enable DNSSEC and select policy

Men & Mice Management Console - [uk.eu.com. on dnssec.example.com.]

File Edit Tools Query Zone Window Help

☐ Hide DNSSEC Records Quick Filter:

Master: bind.local. Serial: 2009022301 Expire: 604800
 Hostmaster: hostmaster.uk.eu.com. Refresh: 28800 Neg. caching: 7200
 Default TTL: 7200 Retry: 7200 TTL of SOA: 86400

Name	TTL	Type	Data	Comment
				dnssec_signzone version 9.5.0-P2
uk.eu.com.	86400	RRSIG	SOA 5 3 86400 20090220153537 20090121153537 18915 uk.eu.com.	Dzyc
uk.eu.com.	86400	NS	example.com.	
uk.eu.com.	86400	NS	example.org.	
uk.eu.com.	86400	RRSIG	NS 5 3 86400 20090220111710 20090121111710 18915 uk.eu.com.	q8Qf
uk.eu.com.	7200	NSEC	demo.uk.eu.com. NS SOA RRSIG NSEC DNSKEY	
uk.eu.com.	7200	RRSIG	NSEC 5 3 7200 20090220111710 20090121111710 18915 uk.eu.com.	pm1f
uk.eu.com.	86400	DNSKEY	256 3 5 AwEAAcFxE8dNQj7783Vna9shHE2YObBMweskJ11YeD/uznnj6laDmJ/KbDKQ8dA:	key id = 18915
uk.eu.com.	86400	DNSKEY	257 3 5 AwEAAZ068B39PaGVGPM+sCPUFeM0/skR7T0QZvdxbg+ayttohVETxog7i8uzrF8r	key id = 57988
uk.eu.com.	86400	RRSIG	DNSK 5 3 86400 20090220111710 20090121111710 18915 uk.eu.com.	aaqb
uk.eu.com.	86400	RRSIG	DNSK 5 3 86400 20090220111710 20090121111710 57988 uk.eu.com.	CEIE
demo.uk.eu.com.	7200	A	192.12.12.11	
demo.uk.eu.com.	7200	RRSIG	A 5 4 7200 20090220112611 20090121112611 18915 uk.eu.com.	ISD9
demo.uk.eu.com.	7200	NSEC	dnssec.uk.eu.com. A RRSIG NSEC	
demo.uk.eu.com.	7200	RRSIG	NSEC 5 4 7200 20090220111710 20090121111710 18915 uk.eu.com.	Huof
dnssec.uk.eu.com.	7200	A	10.1.2.39	
dnssec.uk.eu.com.	7200	RRSIG	A 5 4 7200 20090220111710 20090121111710 18915 uk.eu.com.	dQW
dnssec.uk.eu.com.	7200	NSEC	logo.uk.eu.com. A RRSIG NSEC	
dnssec.uk.eu.com.	7200	RRSIG	NSEC 5 4 7200 20090220111710 20090121111710 18915 uk.eu.com.	gN/
logo.uk.eu.com.	7200	A	192.0.11.12	
logo.uk.eu.com.	7200	RRSIG	A 5 4 7200 20090220111710 20090121111710 18915 uk.eu.com.	a3Tc
logo.uk.eu.com.	7200	NSEC	mail.uk.eu.com. A RRSIG NSEC	
logo.uk.eu.com.	7200	RRSIG	NSEC 5 4 7200 20090220111710 20090121111710 18915 uk.eu.com.	CyJk
mail.uk.eu.com.	7200	AAAA	200a:abba:cafe::33	
mail.uk.eu.com.	7200	RRSIG	AAAA 5 4 7200 20090220111710 20090121111710 18915 uk.eu.com.	a0TC

62 records

Hides DNSSEC records csmobile2

zone with DNSSEC records
shown

Men & Mice Management Console - [uk.eu.com. on dnssec.example.com.]

File Edit Tools Query Zone Window Help

☒ Hide DNSSEC Records Quick Filter:

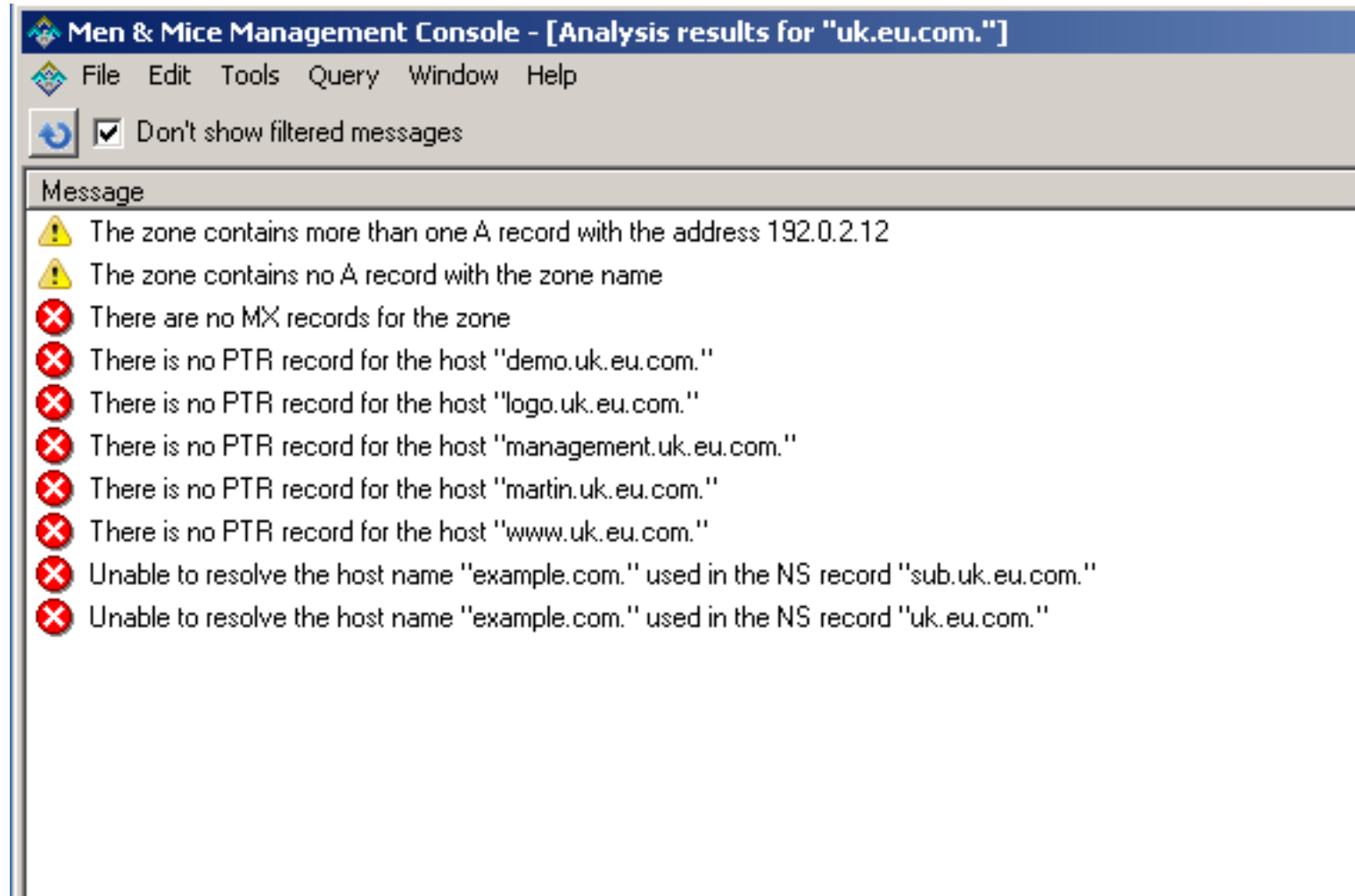
Master: bind.local. Serial: 2009022301 Expire: 604800
 Hostmaster: hostmaster.uk.eu.com. Refresh: 28800 Neg. caching: 7200
 Default TTL: 7200 Retry: 7200 TTL of SOA: 86400

Name	TTL	Type	Data	Comment
				dnssec_signzone version 9.5.0-P2
uk.eu.com.	86400	NS	example.com.	
uk.eu.com.	86400	NS	example.org.	
demo.uk.eu.com.	7200	A	192.12.12.11	
dnssec.uk.eu.com.	7200	A	10.1.2.39	
logo.uk.eu.com.	7200	A	192.0.11.12	
mail.uk.eu.com.	7200	AAAA	200a:abba:cafe::33	
management.uk.eu.com.	7200	A	192.0.2.12	
montreal.uk.eu.com.	7200	A	10.1.1.1	
project10.uk.eu.com.	7200	A	172.17.0.2	
sub.uk.eu.com.	7200	NS	example.com.	
sub.uk.eu.com.	7200	NS	example.org.	
teched.uk.eu.com.	7200	A	172.22.68.10	
test.uk.eu.com.	7200	A	192.0.2.12	
tuesday.uk.eu.com.	7200	A	10.1.2.3	
www.uk.eu.com.	86400	A	1.2.3.4	
www.uk.eu.com.	86400	AAAA	::2	
martin.uk.eu.com.		A	1.2.3.5	

18 of 62 records

Hides DNSSEC records csmobile2

zone with DNSSEC records
hidden



DNS Expert checks for DNSSEC zones

Benefits of the Men & Mice Solution

- free choice of
 - DNSSEC signer
 - policy management
 - and DNS Server engine

Benefits of the Men & Mice Solution

- supports DNSSEC with
 - OpenDNSSEC
 - Secure64
 - plain BIND DNS Server
 - Windows 2008R2 DNS Server

Benefits of the Men & Mice Solution

- Fine grained access control
- Detailed history trail
- Sanity checks prevent DNS outage due to human error
- Integration into IP Address Management and DHCP Management
- Non-intrusive approach

Benefits of the Men & Mice Solution

- Questions?



over 10.000 customers

