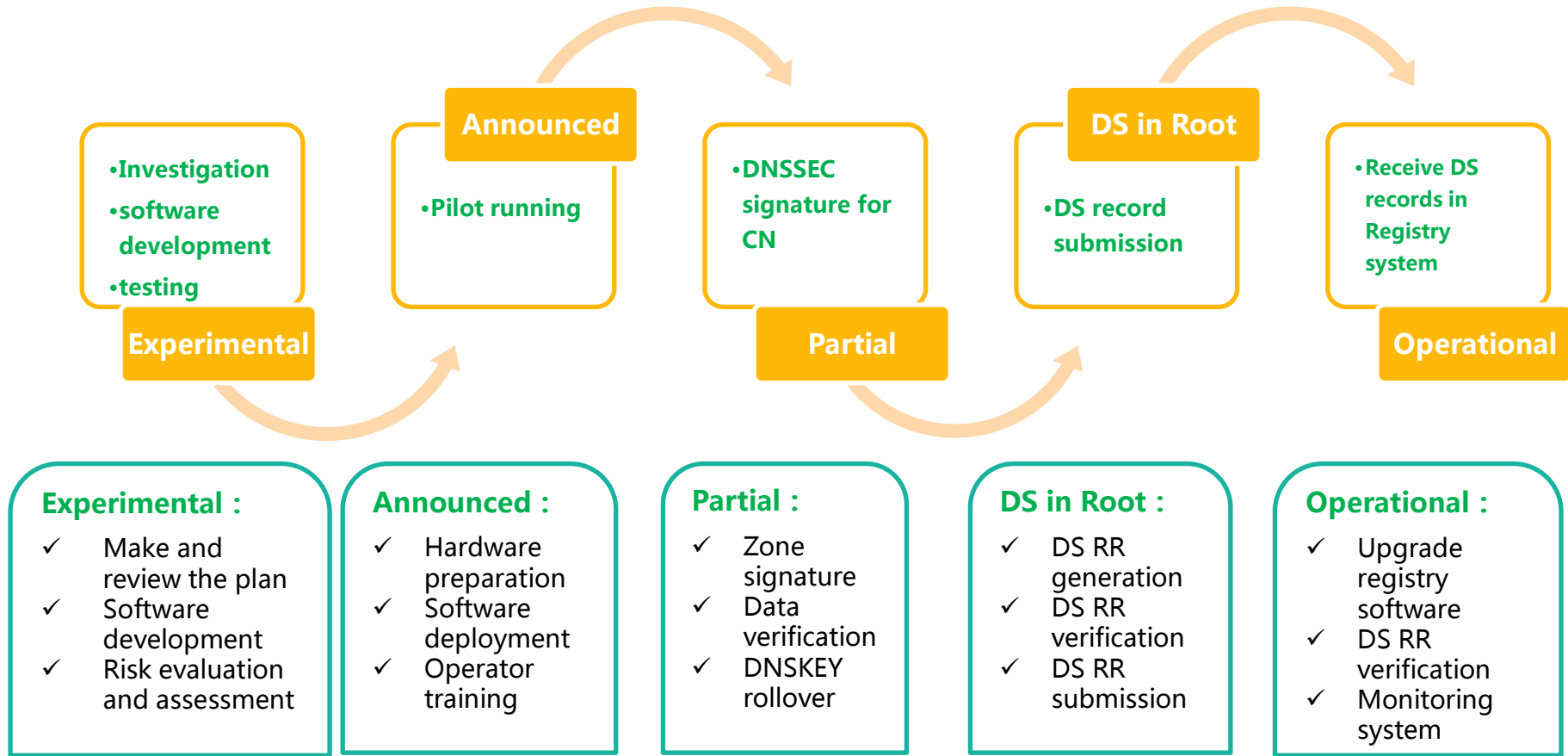




CNNIC DNSSEC Deployment in the Region



Technical development

- ◆ Develop a **signing system** to improve high-availability and automation.(Key management and disaster recovery or leak)
- ◆ Update **SRS system** to get ready for DNSSEC-enabled domain names to be registered
- ◆ **DNSSEC monitoring system**: including status check for registry system and key rollover system, status check for HSM and other inner services which are used by DNSSEC deployment solution, status check for important domain periodically
- ◆ Simulate the real network environment including the whole DNSSEC chain of trust

Pilot Run

- ◆ There were 5,600,000 CN domains filled, 6,900,000 domain records updated, 170,000 DS records submitted in that platform, ZSK rotated 102 times in this platform while KSK 51



National domain monitor system





<< Return to homepage

Name server

Root

TLD

CCTLD

GTLD

Other name server

important info system

important delegation

important domain name

Resolver

Important ISPs

Public DNS

Other resolvers

place :

Beijing

Detail info

statistics

1

upper

next

end

domain	weibo.com.cn	whitehouse.gov	www.cnmc.com.cn	www.gov.cn	
	ns3.sina.com.cn.	zc.akam.net.	N/A	dns1.www.gov.cn.	dns2.www.gov.cn.
availability	yes	yes	N/A	yes	yes
validity	yes	yes	N/A	yes	yes
Name server version	-	-	-	-	-
recursive	-	no	N/A	-	no
IPV6 record	no	yes	N/A	no	no
IPV6 available	no	-	N/A	no	no
TCP	yes	yes	-	no	yes
DNSSEC	no	yes	-	-	no
NSEC3	no	yes	-	-	no
EDNS0	no	yes	-	-	yes



<< Return to homepage

Name server

Root

TLD

CCTLD

GTLD

Other name server

important info system

important delegation

important domain name

Resolver

Important ISPs

Public DNS

Other resolvers

place

Beijing

Detail info

statistics

1

upper

next

end

监测对象	221.6.96.177	60.15.127.10	60.2.152.70	8.8.4.4	8.8.8.8
availability	yes	yes	yes	yes	yes
DNSSEC	no	no	no	no	yes

place

Harbin

Detail info

statistics

1

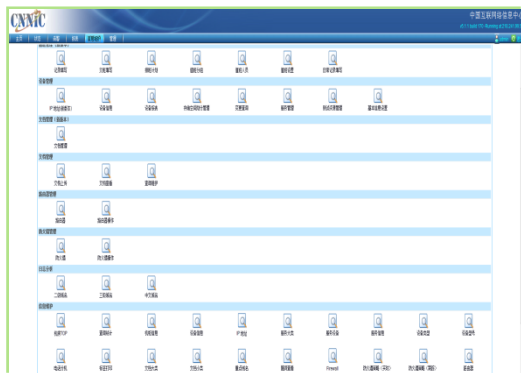
upper

next

end

监测对象	221.6.96.177	60.15.127.10	60.2.152.70	8.8.4.4	8.8.8.8
availability	yes	yes	yes	yes	yes
DNSSEC	no	no	no	no	no

Monitoring all resources in CNNIC

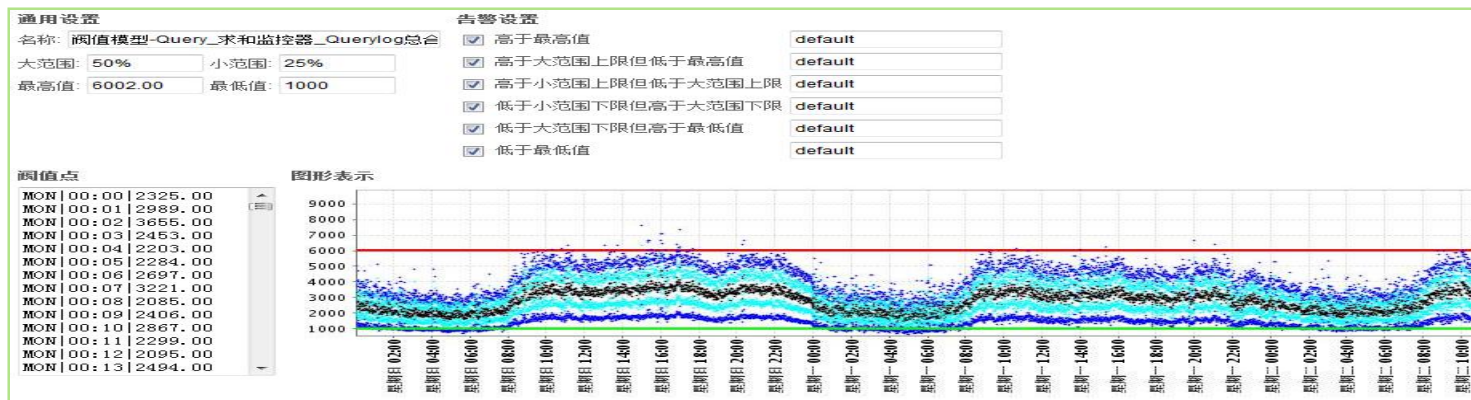


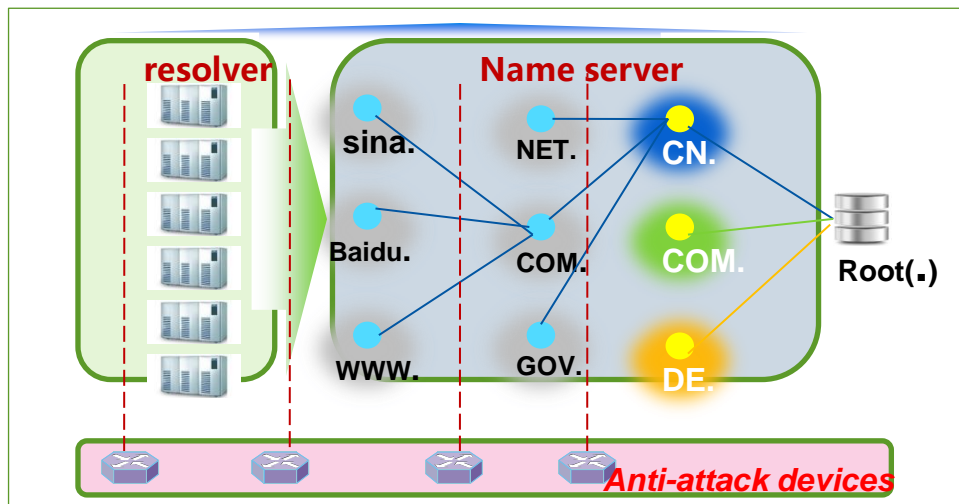
Show all useful info for operators

CNNIC报表 - 全服务导出

设备	IP地址	描述信息	PORT	SERVICE	PID	PPID	PROC
C0101	10.10.1.1		5353 9053	named named	28023 28023	1 1	/usr/local/sbin/named -u named -t /var/named/chroot/ -c /etc/named_cn_avfr_3353.conf -n 8 28023 /usr/local/sbin/named -u named -t /var/named/chroot/ -c /etc/named_cn_avfr_3353.conf -n 8
C0102	10.10.1.2		5353 9053	named named	29133 29133	1 1	29133 /usr/local/sbin/named -u named -t /var/named/chroot/ -c /etc/named_cn_avfr_3353.conf -n 8 29133 /usr/local/sbin/named -u named -t /var/named/chroot/ -c /etc/named_cn_avfr_3353.conf -n 8

Set threshold values for warning





- Monitor the DNS lookup
- Block the DDOS attack query
- Anti-TCP Flood
- High performance
- Emergency Cache



CNNIC Anti-attack device



Using FPGA to improve the performance



中国信息社会重要的基础设施建设者、运行者和管理者

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