

Automatic Key Management for BIND

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ISC

BIND can roll keys (ZSKs, soon also KSKs) on a pre-determined schedule, but the scheduling has to be done by hand and is cumbersome:

```
$ ksk=`dnssec-keygen -3fk example.com`  
$ zsk1=`dnssec-keygen -3 example.com`  
$ dnssec-settime -I now+6mo -D now+7mo $zsk1  
$ zsk2=`dnssec-keygen -S $zsk1`  
$ dnssec-settime -I now+1y -D now+13mo $zsk2  
$ zsk3=`dnssec-keygen -S $zsk2`
```

... and so on ...

We need fire-and-forget maintenance of DNSKEYs...

- Zone security policies (key strength, signing parameters, rollover period, coverage period) defined in a policy file, like:

```
policy default {  
    algorithm rsasha256;  
    coverage 1y;  
    roll-period zsk 6mo;  
    pre-publish zsk 6w;  
    post-publish zsk 6w;  
    keyttl 1h;  
};
```

- Tool to be run unattended (e.g. by cron) to check the keys adherence to policy, and make changes or generate new keys when needed.

`dnssec-keymgr`

It's 90% done! Now to do the other 90%.

Python source:

<https://github.com/each/bind9-collab>

... in the “`dnssec-keymgr`” branch.