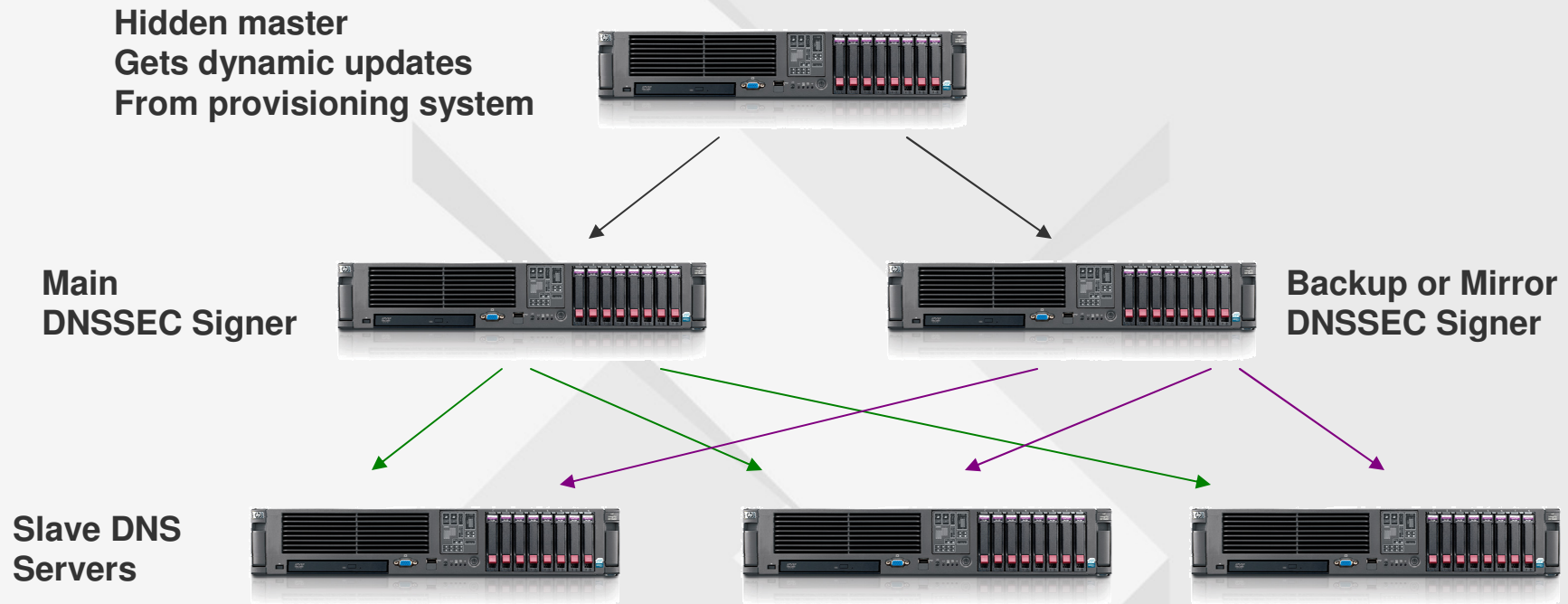


DNSSEC IXFR Issue when 2 signing engines are involved



Since the 2 signers will have slightly different time-of-day:

- RRSIG's, (inception/expiration/sig) will be different
- Backup Signer can't delete RRSIG at slaves because of mismatch

Possible Solutions

1. Without protocol changes:
 1. Make the parallel signer a slave to the main signer when in “standby mode”, elevate to master if main signer dies.
 - dis-allows mirrored signing
 2. Query the slave to get the RRSIG in order to match the data for deletion.
 - Possible firewall problem; inefficient to do query
- With IXFR protocol changes:
 1. Let the IXFR protocol delete a single RRSIG record by matching the IN, RRSIG, TYPES-COVERED fields only and ignore the remaining data
 2. Delete entire RRSIG RRSET, then add back the RRSIG’s that should have stayed
 - more computation, inefficient

1. .