DNSSEC Quick Start Guide

A. Enable DNSSEC (from "without DNSSEC" to "with DNSSEC")

1. Ask the DNS hosting provider to set up DNSSEC signed zone for your .hk domain name.
2. Ask the DNS hosting provider to provide the DS record(s).
3. Ensure the successful completion in step 1-2 for DNSSEC key signing. Otherwise, your domain name will be found to be bogus if failure of completion in step 1-2.
4. Ask your registrar to add the new DS record(s) to HKIRC.

B. Change DNS hosting provider (Migrated DNSSEC enabled DNS Server)

1. Ask the new DNS hosting provider to set up DNSSEC signed zone for your domain name.
2. Ask the new DNS hosting provider to provide new DNSKEY records (both KSKs and ZSKs) and new DS record(s).
3. Ask the old DNS hosting provider to add the new DNSKEY records (both KSKs and ZSKs) to your domain name then re-sign the domain name records.
4. Ask your registrar to add the new DS record(s) to HKIRC.
5. Wait for the longest TTL of all records in your domain name and DS record(s).
6. Ensure the successful completion in step 1-5 for new DNSSC key signing by the respective DNS hosting provider. Otherwise, your domain name may be found to be bogus if failure of completion in step 1-5.
7. Ask your registrar to remove the old NS records, add the new name servers NS records, and remove the old DS record(s) from/to your domain name.

Alternative Steps – For those who require an emergency transfer, have constraints of time and issue of coordination with hosting parties, you can find the below quick-fix solution

1. Ask the new DNS hosting provider to set up an unsigned zone (i.e. with DNSSEC turned off) for your domain name.
2. Ask your registrar to turn off the DNSSEC by removing old DS record(s) of your domain name.
3. Wait for the longest TTL of all records in your domain name and DS record(s).
4. Ensure the successful completion in step 2-3 so as to switch the domain name from DNSSEC enabled to DNSSEC disabled. Otherwise your domain name may be found to be bogus if failure of completion in step 1-3.
5. Ask your registrar to move the old NS records to the new name servers or perform domain name registrar transfer/ownership transfer transaction.
6. Ask the new DNS hosting provider to set up DNSSEC signed zone for your domain name.
7. Ask the new DNS hosting provider to provide the new DS record(s).

8. Wait for the longest TTL of all records in your domain name and DS record(s).
9. Ensure the successful completion in step 6- 8 so as to switch domain name from DNSSEC disabled to DNSSEC enabled. Otherwise, your domain name may be found to be bogus if failure of completion in step 6-8.
10. Ask the registrar to add the new DS record(s) to HKIRC.

C. Domain name registration and domain name renewal

No changes are required for these transactions. A new registered domain name is required to be activated prior to the DNSSEC in place.

D. Transfer of domain name (including DNS hosting) between registrars

Registrants need to coordinate the domain transfer steps, including the NS, DS, and DNSKEY records which should be properly managed by the giving and receiving registrars. In this scenario, the giving registrar represents an old DNS hosting provider, while the receiving registrar will be a new DNS hosting provider.

1. Ask the receiving registrar to set up a DNSSEC signed zone for the domain name handling.
2. Ask the receiving registrar to provide the new DNSKEY records (both KSKs and ZSKs) as well as the new DS record(s).
3. Ask the giving registrar to add new DNSKEY records (both KSKs and ZSKs) for the domain name, and re-sign the domain name records.
4. Ask the giving registrar to add the new DS record(s) to HKIRC.
5. Wait for the longest TTL of all records in your domain name and DS record(s).
6. Ensure the successful completion in step 1-5 for your domain name so as to transfer the domain name to your new DNS hosting registrar with new DNSSEC Key. Otherwise, your domain name may be found to be bogus if failure of completion in step 1-5.
7. Ask the giving registrar to remove the old name servers NS record, add the new name servers NS records, and remove old DS record(s) from/to your domain name.
8. Ask the receiving registrar to perform domain name registrar-transfer process.

Alternative Steps – For those who require an emergency transfer, have constraints of time and issue of coordination between giving and receiving hosting parties, you can find the below quick-fix solution
1. Ask the receiving registrar to set up an unsigned zone (i.e. with DNSSEC turned off) for your domain name.
2. Ask the giving registrar to turn off the DNSSEC by removing old DS record(s) of your domain name.
3. Wait for the longest TTL of all records in your domain name and DS record(s).

4. Ensure the successful completion in step 1-3 for domain name switching from DNSSEC enabled to DNSSEC disabled. Otherwise, your domain name may be found to be bogus if failure of completion in step 1-3.
5. Ask the giving registrar to remove old name servers NS records, and add new name servers NS records.
6. Ask the receiving registrar to perform domain name registrar-transfer.
7. Ask the receiving registrar to set up DNSSEC signed zone for your domain name.
8. Ask the new DNS hosting registrar to provide the new DS record(s).
9. Wait for the longest TTL of all records in your domain name and DS record(s).
10. Ensure the successful completion in step 7-9 so as to switch the domain name from DNSSEC disabled to DNSSEC enabled. Otherwise, your domain name may be found to be bogus if failure pf completion in step 7-9.
11. Ask the receiving registrar to add the new DS record(s) to HKIRC.

E. Transfer of domain name (no change to DNS hosting) between registrars If there is no change on any DNS server (NS records), then you do not need to do extra step with domain name transfer.

F. Transfer of domain name (including DNS hosting) between domain name owners.
1. Ask the new DNS hosting provider to set up DNSSEC signed zone for your domain name.
2. Ask the new DNS hosting provider to provide the new DNSKEY records (both KSKs and ZSKs), as well as the new DS record(s).
3. Ask the old DNS hosting provider to add new DNSKEY records (both KSKs and ZSKs) for your domain name, and re-sign the domain name records.
4. Ask the registrar to add the new DS record(s) to HKIRC.
5. Wait for the longest TTL of all records in your domain name and DS record(s).
6. Ensure the successful completion in step 1- 5 so as to transfer the domain name to your new DNS hosting provider with new DNSSEC Key. Otherwise, your domain name may be found to be bogus if failure of completion in step 1-5.
7. Ask the registrar to remove the old name servers NS records, add the new name servers NS records, and remove the old DS record(s) from/to your domain name.
8. Ask the registrar to perform domain name ownership transfer process.

Alternative Steps – For those who require an emergency transfer, have constraints of time and issue of coordination between old and new hosting parties, you can find the below quick-fix solution:
1. Ask the new DNS hosting provider to set up the unsigned zone (i.e. with DNSSEC turned off) for your domain name.
2. Ask the registrar to turn off the DNSSEC by removing old DS record(s) from your domain name

3. Wait for the longest TTL of all records in your domain name and DS record(s).

4. Ensure the successful completion in step 2-3 so as to switch the domain name from DNSSEC enabled to DNSSEC disabled. Otherwise, your domain name may be found to be bogus if failure of completion in step 2-3.

5. Ask the registrar to remove the old name servers NS records, add the new name servers NS records; or perform domain name ownership transfer process.

6. Ask the new hosting provider to set up DNSSEC signed zone for your domain name.

7. Ask the new DNS hosting provider to provide the new DS record(s).

8. Wait for the longest TTL of all records in your domain name and DS record(s).

9. Ensure the successful completion in step 6-8 so as to switch the domain name from DNSSEC disabled to DNSSEC enabled. Otherwise, your domain name may be found to be bogus if failure of completion in step 6-8.

10. Ask the registrar to add the new DS record(s) to HKIRC.

G. Transfer of domain name (no change to DNS hosting) between domain owners.

If there is no change on any DNS server (NS records), then you do not need to do extra step with domain name ownership transfer.

H. Add/modify/delete the name servers/hosts on the same DNS hosting provider

You do not need to take any extra step, as your DNS hosting provider should keep all name servers synchronized with DNSSEC records.

I. Release of DNSSEC enabled domain name to public

A non-renewable domain name will be released to public. Therefore, the corresponding DNSSEC information of the domain name will be removed.

J. DNSSEC administrative function

The DNSSEC administrative actions to add/modify/delete DS records can be done online using registrant web panel, registrar web panel or the registrar EPP API.