

# DNSSEC lifecycle report

fus3dcoating.com

Time window

earliest → now

Generated

2026-04-17T08:51:18.471051+00:00

Key directory

`/mnt/bind/keys/fus3dcoating.com`

# Summary

During the reported window 26 DNS observation(s).

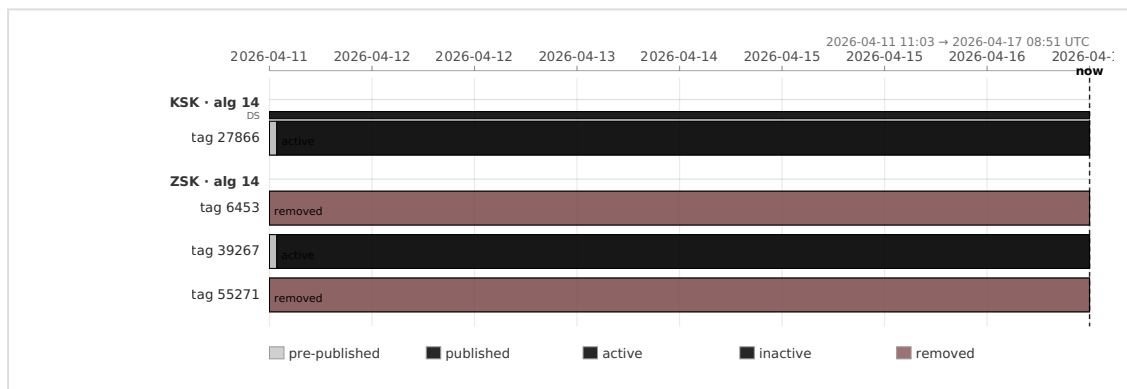
- Keys observed: 4
- Events recorded: 35
- State changes (state\_file): 0
- State changes (rndc dnssec -status): 0
- DNS observations (zone + parent): 26
- iodyn-dnssec actions: 0

# Key inventory

Tag	Role	Algorithm	Key id	First seen
27866	KSK	14	Kfus3dcoating.com. +014+27866	2026-04-11T11:03:18Z
6453	ZSK	14	Kfus3dcoating.com. +014+06453	2026-04-11T11:03:18Z
39267	ZSK	14	Kfus3dcoating.com. +014+39267	2026-04-11T11:03:18Z
55271	ZSK	14	Kfus3dcoating.com. +014+55271	2026-04-11T11:03:18Z

# Rollover view

Every observed key on a time axis, grouped by (role, algorithm), with phase-coloured bars (pre-published / published / active / retired / removed). A thin DS overlay stripe above each KSK row shows when the parent-side chain of trust was actually complete, which is often when the interesting DNSSEC stories happen. If two algorithms are simultaneously active, the overlap region is highlighted behind their bars.



# Calendar view

Monthly calendars covering the reported window. Each day is shaded by the number of events observed and carries a coloured dot for every event source that fired that day. Hover any day for the count and a sample of the events (live UI only).

- on-disk state
- rndc dnssec -status
- DNS probe
- K\*.key timing
- iodyn / syslog
- named.log
- scheduled (from K\*.key)
- 0 today

July 2025						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	1	2	3	4	5	6
7	8 <span style="color: blue;">□</span>	9 <span style="color: blue;">□</span>	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

August 2025						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## September 2025

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

## October 2025

Mon	Tue	Wed	Thu	Fri	Sat	Sun
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2

## November 2025

Mon	Tue	Wed	Thu	Fri	Sat	Sun
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December 2025						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

January 2026						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

February 2026						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	1

## March 2026

Mon	Tue	Wed	Thu	Fri	Sat	Sun
23	24	25	26	27	28	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

## April 2026

Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3

## May 2026

Mon	Tue	Wed	Thu	Fri	Sat	Sun
27	28	29	30	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## June 2026

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

## July 2026

Mon	Tue	Wed	Thu	Fri	Sat	Sun
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2



# Chronological event log

2026-04-11

Time	Source	Key	Type	Summary
11:03:18Z	state	ZSK 6453	state_key_observed	new K*.state for fus3dcoating.com ZSK tag=6453
11:03:18Z	state	ZSK 39267	state_key_observed	new K*.state for fus3dcoating.com ZSK tag=39267
11:03:18Z	state	KSK 27866	state_key_observed	new K*.state for fus3dcoating.com KSK tag=27866
11:03:18Z	state	ZSK 55271	state_key_observed	new K*.state for fus3dcoating.com ZSK tag=55271
11:03:18Z	key	ZSK 6453	key_file_observed	new K*.key for fus3dcoating.com ZSK tag=6453
11:03:18Z	key	KSK 27866	key_file_observed	new K*.key for fus3dcoating.com KSK tag=27866
11:03:18Z	key	ZSK 39267	key_file_observed	new K*.key for fus3dcoating.com ZSK tag=39267
11:03:18Z	key	ZSK 55271	key_file_observed	new K*.key for fus3dcoating.com ZSK tag=55271
11:03:19Z	dns	39267	dns_dnskey_appeared_at_zone	DNSKEY (key tag 39267) appeared at zone for fus3dcoating.com
11:03:19Z	dns	27866	dns_dnskey_appeared_at_zone	DNSKEY (key tag 27866) appeared at zone for fus3dcoating.com
11:03:19Z	dns		dns_soa_appeared_at_zone	SOA observed at zone for fus3dcoating.com (serial 152)
11:03:19Z	dns	27866	dns_cds_appeared_at_zone	CDS (key tag 27866) appeared at zone for fus3dcoating.com
11:03:19Z	dns	27866	dns_cdnskey_appeared_at_zone	

Time	Source	Key	Type	Summary
				CDNSKEY (key tag 27866) appeared at zone for fus3dcoating.com
11:03:19Z	rndc		rndc_first_observation	fus3dcoating.com: observed 4 key(s) via rndc
11:03:19Z	dns	27866	dns_ds_appeared_at_parent	DS (key tag 27866) appeared at parent for fus3dcoating.com
13:03:17Z	dns	27866	dns_rrsig_appeared_at_zone	RRSIG over CDNSKEY (key tag 27866) appeared at zone for fus3dcoating.com
13:03:17Z	dns	27866	dns_rrsig_appeared_at_zone	RRSIG over CDS (key tag 27866) appeared at zone for fus3dcoating.com
13:03:17Z	dns	27866	dns_rrsig_appeared_at_zone	RRSIG over DNSKEY (key tag 27866) appeared at zone for fus3dcoating.com
13:03:17Z	dns	39267	dns_rrsig_appeared_at_zone	RRSIG over SOA (key tag 39267) appeared at zone for fus3dcoating.com

## 2026-04-12

Time	Source	Key	Type	Summary
03:59:29Z	dns	39267	dns_rrsig_appeared_at_zone	RRSIG over SOA (key tag 39267) appeared at zone for fus3dcoating.com
03:59:29Z	dns	39267	dns_rrsig_disappeared_at_zone	RRSIG over SOA (key tag 39267) disappeared at zone for fus3dcoating.com
11:24:25Z	dns	27866	dns_rrsig_appeared_at_zone	RRSIG over CDNSKEY (key tag 27866)

Time	Source	Key	Type	Summary
				appeared at zone for fus3dcoating.com
11:24:25Z	dns	27866	dns_rrsig_appeared_at_zone	RRSIG over CDS (key tag 27866) appeared at zone for fus3dcoating.com
11:24:25Z	dns	27866	dns_rrsig_appeared_at_zone	RRSIG over DNSKEY (key tag 27866) appeared at zone for fus3dcoating.com
11:24:25Z	dns	39267	dns_rrsig_appeared_at_zone	RRSIG over SOA (key tag 39267) appeared at zone for fus3dcoating.com
11:24:25Z	dns	27866	dns_rrsig_disappeared_at_zone	RRSIG over CDNSKEY (key tag 27866) disappeared at zone for fus3dcoating.com
11:24:25Z	dns	27866	dns_rrsig_disappeared_at_zone	RRSIG over CDS (key tag 27866) disappeared at zone for fus3dcoating.com
11:24:25Z	dns	27866	dns_rrsig_disappeared_at_zone	RRSIG over DNSKEY (key tag 27866) disappeared at zone for fus3dcoating.com
11:24:25Z	dns	39267	dns_rrsig_disappeared_at_zone	RRSIG over SOA (key tag 39267) disappeared at zone for fus3dcoating.com

## 2026-04-13

Time	Source	Key	Type	Summary
15:09:58Z	dns	39267	dns_rrsig_appeared_at_zone	RRSIG over SOA (key tag 39267) appeared at zone

Time	Source	Key	Type	Summary
				for fus3dcoating.com
15:09:58Z	dns	39267	dns_rrsig_disappeared_at_zone	RRSIG over SOA (key tag 39267) disappeared at zone for fus3dcoating.com
18:54:23Z	dns	39267	dns_rrsig_appeared_at_zone	RRSIG over SOA (key tag 39267) appeared at zone for fus3dcoating.com
18:54:23Z	dns	39267	dns_rrsig_disappeared_at_zone	RRSIG over SOA (key tag 39267) disappeared at zone for fus3dcoating.com

## 2026-04-14

Time	Source	Key	Type	Summary
19:57:57Z	dns	39267	dns_rrsig_appeared_at_zone	RRSIG over SOA (key tag 39267) appeared at zone for fus3dcoating.com
19:57:57Z	dns	39267	dns_rrsig_disappeared_at_zone	RRSIG over SOA (key tag 39267) disappeared at zone for fus3dcoating.com

## Per-key breakdown

For every observed key: the current `K*.key` timings and `K*.state` fields captured at report time, plus a calendar and split DNS / File timelines limited to that key's events. KSKs naturally show their DS lifecycle at the parent because DS events are tagged by key tag at emit time.

# KSK · tag 27866

Algorithm: 14 · Key id: Kfus3dcoating.com.+014+27866 · First seen: 2026-04-11T11:03:18Z

## K\*.key file timings

Field	Value
Created	2025-07-09 10:39:29 UTC
Publish	2025-07-09 10:39:29 UTC
Activate	2025-07-09 10:39:29 UTC
Revoke	–
Inactive	2026-07-09 10:39:29 UTC
Delete	2026-07-10 12:39:29 UTC
SyncPublish	2025-07-10 11:44:29 UTC
SyncDelete	–

## K\*.state — state machine

Field	Value
GoalState	omnipresent
DNSKEYState	omnipresent
KRRSIGState	omnipresent
DSState	omnipresent

## K\*.state — timestamps

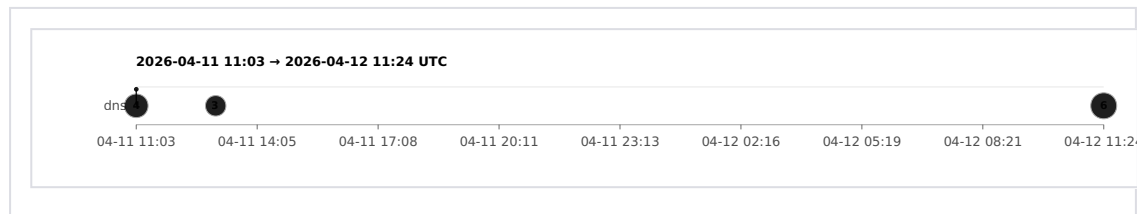
Field	Value
Generated	20250709103929 (Wed Jul 9 10:39:29 2025)
Published	20250709103929 (Wed Jul 9 10:39:29 2025)
Active	20250709103929 (Wed Jul 9 10:39:29 2025)
Retired	20260709103929 (Thu Jul 9 10:39:29 2026)
Removed	20260710123929 (Fri Jul 10 12:39:29 2026)
DNSKEYChange	20250709115429 (Wed Jul 9 11:54:29 2025)
KRRSIGChange	20250709115429 (Wed Jul 9 11:54:29 2025)
DSChange	20251013054053 (Mon Oct 13 05:40:53 2025)
DSPublish	20251012034053 (Sun Oct 12 03:40:53 2025)
PublishCDS	20250710114429 (Thu Jul 10 11:44:29 2025)

# Calendar

- on-disk state
- rndc dnssec -status
- DNS probe
- K\*.key timing
- iodyn / syslog
- named.log
- scheduled (from K\*.key)
- 0 today

April 2026						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	31	1	2	3	4	5
6	7	8	9	10	11 <span style="color: green;">●</span> <span style="color: orange;">●</span> <span style="color: gold;">●</span>	12 <span style="color: teal;">●</span>
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3

## DNS events for this key



## File events for this key



# ZSK · tag 6453

Algorithm: 14 · Key id: Kfus3dcoating.com.+014+06453 · First seen: 2026-04-11T11:03:18Z

## K\*.key file timings

Field	Value
Created	2025-11-06 09:24:29 UTC
Publish	2025-11-06 09:24:29 UTC
Activate	2025-11-06 10:39:29 UTC
Revoke	–
Inactive	2026-01-05 10:39:29 UTC
Delete	2026-01-15 11:44:29 UTC
SyncPublish	–
SyncDelete	–









## K\*.state — state machine

Field	Value
GoalState	hidden
DNSKEYState	hidden
ZRRSIGState	hidden


## K\*.state — timestamps

Field	Value
Generated	20251106092429 (Thu Nov 6 09:24:29 2025)
Published	20251106092429 (Thu Nov 6 09:24:29 2025)
Active	20251106103929 (Thu Nov 6 10:39:29 2025)
Retired	20260105103929 (Mon Jan 5 10:39:29 2026)
Removed	20260115114429 (Thu Jan 15 11:44:29 2026)
DNSKEYChange	20260115115929 (Thu Jan 15 11:59:29 2026)
ZRRSIGChange	20260115114429 (Thu Jan 15 11:44:29 2026)

## Calendar

-  on-disk state
-  rndc dnssec -status
-  DNS probe
-  K\*.key timing
-  iodyn / syslog
-  named.log
-  scheduled (from K\*.key)
-  0 today

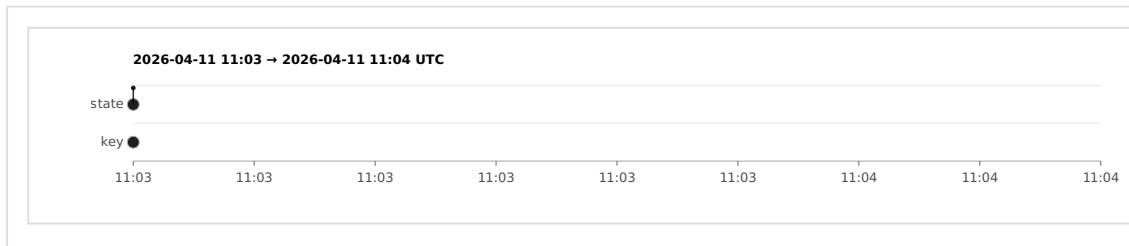
## April 2026

Mon	Tue	Wed	Thu	Fri	Sat	Sun	
30	31	1	2	3	4	5	
6	7	8	9	10		11	12
13	14	15	16	<b>17</b>	18	19	
20	21	22	23	24	25	26	
27	28	29	30	1	2	3	

### DNS events for this key

No events in the reported window.

### File events for this key



# ZSK · tag 39267

Algorithm: 14 · Key id: Kfus3dcoating.com.+014+39267 · First seen: 2026-04-11T11:03:18Z

## K\*.key file timings

Field	Value
Created	2026-03-06 09:24:29 UTC
Publish	2026-03-06 09:24:29 UTC
Activate	2026-03-06 10:39:29 UTC
Revoke	–
Inactive	2026-05-05 10:39:29 UTC
Delete	2026-05-15 11:44:29 UTC
SyncPublish	–
SyncDelete	–









## K\*.state — state machine

Field	Value
GoalState	omnipresent
DNSKEYState	omnipresent
ZRRSIGState	omnipresent

## K\*.state — timestamps

Field	Value
Generated	20260306092429 (Fri Mar 6 09:24:29 2026)
Published	20260306092429 (Fri Mar 6 09:24:29 2026)
Active	20260306103929 (Fri Mar 6 10:39:29 2026)
Retired	20260505103929 (Tue May 5 10:39:29 2026)
Removed	20260515114429 (Fri May 15 11:44:29 2026)
DNSKEYChange	20260306103929 (Fri Mar 6 10:39:29 2026)
ZRRSIGChange	20260316114429 (Mon Mar 16 11:44:29 2026)

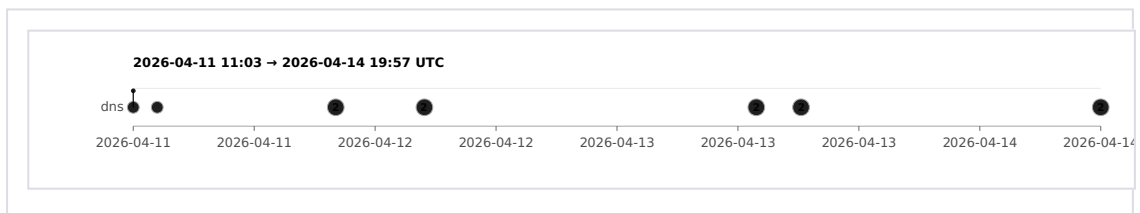
## Calendar

-  on-disk state
-  rndc dnssec -status
-  DNS probe
-  K\*.key timing
-  iodyn / syslog
-  named.log
-  scheduled (from K\*.key)
-  0 today

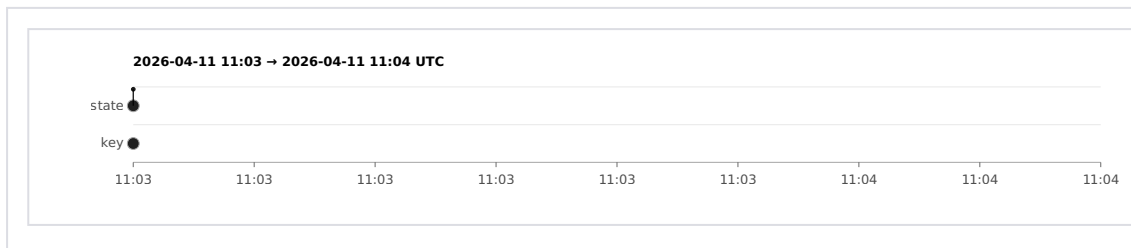
## April 2026

Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3

### DNS events for this key



### File events for this key



# ZSK · tag 55271

Algorithm: 14 · Key id: Kfus3dcoating.com.+014+55271 · First seen: 2026-04-11T11:03:18Z

## K\*.key file timings

Field	Value
Created	2026-01-05 09:24:29 UTC
Publish	2026-01-05 09:24:29 UTC
Activate	2026-01-05 10:39:29 UTC
Revoke	–
Inactive	2026-03-06 10:39:29 UTC
Delete	2026-03-16 11:44:29 UTC
SyncPublish	–
SyncDelete	–









## K\*.state — state machine

Field	Value
GoalState	hidden
DNSKEYState	hidden
ZRRSIGState	hidden

## K\*.state — timestamps

Field	Value
Generated	20260105092429 (Mon Jan 5 09:24:29 2026)
Published	20260105092429 (Mon Jan 5 09:24:29 2026)
Active	20260105103929 (Mon Jan 5 10:39:29 2026)
Retired	20260306103929 (Fri Mar 6 10:39:29 2026)
Removed	20260316114429 (Mon Mar 16 11:44:29 2026)
DNSKEYChange	20260316115929 (Mon Mar 16 11:59:29 2026)
ZRRSIGChange	20260316114429 (Mon Mar 16 11:44:29 2026)

## Calendar

-  on-disk state
-  rndc dnssec -status
-  DNS probe
-  K\*.key timing
-  iodyn / syslog
-  named.log
-  scheduled (from K\*.key)
-  0 today

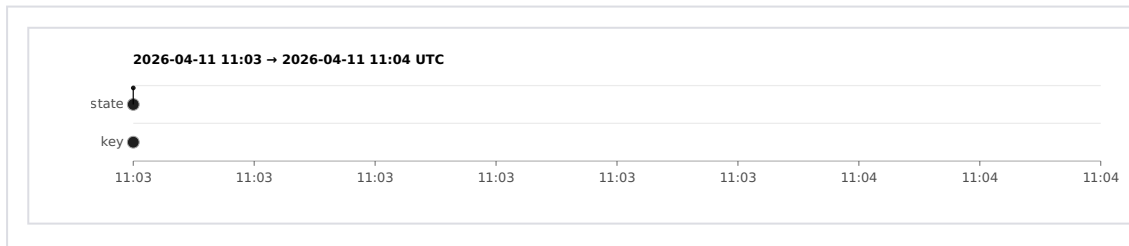
## April 2026

Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	31	1	2	3	4	5
6	7	8	9	10	<span style="color: green;">●</span> <span style="color: orange;">●</span>	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3

### DNS events for this key

No events in the reported window.

### File events for this key



# DNS observations

Samples of what was visible at the zone and at the parent.

When	Where	Type	Change
2026-04-11T11:03:19Z	zone	DNSKEY	DNSKEY (key tag 39267) appeared at zone for fus3dcoating.com
2026-04-11T11:03:19Z	zone	DNSKEY	DNSKEY (key tag 27866) appeared at zone for fus3dcoating.com
2026-04-11T11:03:19Z	zone	SOA	SOA observed at zone for fus3dcoating.com (serial 152)
2026-04-11T11:03:19Z	zone	CDS	CDS (key tag 27866) appeared at zone for fus3dcoating.com
2026-04-11T11:03:19Z	zone	CDNSKEY	CDNSKEY (key tag 27866) appeared at zone for fus3dcoating.com
2026-04-11T11:03:19Z	parent	DS	DS (key tag 27866) appeared at parent for fus3dcoating.com
2026-04-11T13:03:17Z	zone	RRSIG	RRSIG over CDNSKEY (key tag 27866) appeared at zone for fus3dcoating.com
2026-04-11T13:03:17Z	zone	RRSIG	RRSIG over CDS (key tag 27866) appeared at zone for fus3dcoating.com
2026-04-11T13:03:17Z	zone	RRSIG	RRSIG over DNSKEY (key tag 27866) appeared at zone for fus3dcoating.com
2026-04-11T13:03:17Z	zone	RRSIG	RRSIG over SOA (key tag 39267) appeared at zone for fus3dcoating.com
2026-04-12T03:59:29Z	zone	RRSIG	RRSIG over SOA (key tag 39267) appeared at zone for fus3dcoating.com
2026-04-12T03:59:29Z	zone	RRSIG	RRSIG over SOA (key tag 39267) disappeared at zone for fus3dcoating.com
2026-04-12T11:24:25Z	zone	RRSIG	RRSIG over CDNSKEY (key tag 27866) appeared at zone for fus3dcoating.com
2026-04-12T11:24:25Z	zone	RRSIG	

When	Where	Type	Change
			RRSIG over CDS (key tag 27866) appeared at zone for fus3dcoating.com
2026-04-12T11:24:25Z	zone	RRSIG	RRSIG over DNSKEY (key tag 27866) appeared at zone for fus3dcoating.com
2026-04-12T11:24:25Z	zone	RRSIG	RRSIG over SOA (key tag 39267) appeared at zone for fus3dcoating.com
2026-04-12T11:24:25Z	zone	RRSIG	RRSIG over CDNSKEY (key tag 27866) disappeared at zone for fus3dcoating.com
2026-04-12T11:24:25Z	zone	RRSIG	RRSIG over CDS (key tag 27866) disappeared at zone for fus3dcoating.com
2026-04-12T11:24:25Z	zone	RRSIG	RRSIG over DNSKEY (key tag 27866) disappeared at zone for fus3dcoating.com
2026-04-12T11:24:25Z	zone	RRSIG	RRSIG over SOA (key tag 39267) disappeared at zone for fus3dcoating.com
2026-04-13T15:09:58Z	zone	RRSIG	RRSIG over SOA (key tag 39267) appeared at zone for fus3dcoating.com
2026-04-13T15:09:58Z	zone	RRSIG	RRSIG over SOA (key tag 39267) disappeared at zone for fus3dcoating.com
2026-04-13T18:54:23Z	zone	RRSIG	RRSIG over SOA (key tag 39267) appeared at zone for fus3dcoating.com
2026-04-13T18:54:23Z	zone	RRSIG	RRSIG over SOA (key tag 39267) disappeared at zone for fus3dcoating.com
2026-04-14T19:57:57Z	zone	RRSIG	RRSIG over SOA (key tag 39267) appeared at zone for fus3dcoating.com
2026-04-14T19:57:57Z	zone	RRSIG	RRSIG over SOA (key tag 39267) disappeared at zone for fus3dcoating.com

# Appendix — raw state snapshots

## KSK tag=27866

```
Active: 20250709103929 (Wed Jul 9 10:39:29 2025)
DNSKEYChange: 20250709115429 (Wed Jul 9 11:54:29 2025)
DNSKEYState: omnipresent
DSChange: 20251013054053 (Mon Oct 13 05:40:53 2025)
DSPublish: 20251012034053 (Sun Oct 12 03:40:53 2025)
DSState: omnipresent
Generated: 20250709103929 (Wed Jul 9 10:39:29 2025)
GoalState: omnipresent
KRRSIGChange: 20250709115429 (Wed Jul 9 11:54:29 2025)
KRRSIGState: omnipresent
PublishCDS: 20250710114429 (Thu Jul 10 11:44:29 2025)
Published: 20250709103929 (Wed Jul 9 10:39:29 2025)
Removed: 20260710123929 (Fri Jul 10 12:39:29 2026)
Retired: 20260709103929 (Thu Jul 9 10:39:29 2026)
```

## ZSK tag=6453

```
Active: 20251106103929 (Thu Nov 6 10:39:29 2025)
DNSKEYChange: 20260115115929 (Thu Jan 15 11:59:29 2026)
DNSKEYState: hidden
Generated: 20251106092429 (Thu Nov 6 09:24:29 2025)
GoalState: hidden
Published: 20251106092429 (Thu Nov 6 09:24:29 2025)
Removed: 20260115114429 (Thu Jan 15 11:44:29 2026)
Retired: 20260105103929 (Mon Jan 5 10:39:29 2026)
ZRRSIGChange: 20260115114429 (Thu Jan 15 11:44:29 2026)
ZRRSIGState: hidden
```

## ZSK tag=39267

```
Active: 20260306103929 (Fri Mar 6 10:39:29 2026)
DNSKEYChange: 20260306103929 (Fri Mar 6 10:39:29 2026)
DNSKEYState: omnipresent
Generated: 20260306092429 (Fri Mar 6 09:24:29 2026)
GoalState: omnipresent
Published: 20260306092429 (Fri Mar 6 09:24:29 2026)
Removed: 20260515114429 (Fri May 15 11:44:29 2026)
Retired: 20260505103929 (Tue May 5 10:39:29 2026)
ZRRSIGChange: 20260316114429 (Mon Mar 16 11:44:29 2026)
ZRRSIGState: omnipresent
```

## ZSK tag=55271

```
Active: 20260105103929 (Mon Jan 5 10:39:29 2026)
DNSKEYChange: 20260316115929 (Mon Mar 16 11:59:29 2026)
DNSKEYState: hidden
Generated: 20260105092429 (Mon Jan 5 09:24:29 2026)
GoalState: hidden
Published: 20260105092429 (Mon Jan 5 09:24:29 2026)
Removed: 20260316114429 (Mon Mar 16 11:44:29 2026)
Retired: 20260306103929 (Fri Mar 6 10:39:29 2026)
```

ZRRSIGChange: 20260316114429 (Mon Mar 16 11:44:29 2026)  
ZRRSIGState: hidden