

Why image is worth having an eye on

Barbara Jantzen <barbara@desec.io>

DNS OARC 45 – October, 2025 – Stockholm

– TRIGGER WARNING –
This talk contains theories
unbacked by statistical evidence.

Why image is worth having an eye on

Barbara Jantzen <barbara@desec.io>

DNS OARC 45 – October, 2025 – Stockholm

– TRIGGER WARNING –
This talk contains theories
unbacked by statistical evidence.

Why image is worth having an eye on

– TRIGGER WARNING –
This talk may contain traces of
emotions.

Barbara Jantzen <barbara@desec.io>

DNS OARC 45 – October, 2025 – Stockholm

Common perceptions of DNSSEC

DNSSEC...

- is old
- is uncool
- is dead
- is complicated to implement and to use
- is expensive
- causes outages
- burdens the Camel
- is unnecessary
- doesn't do confidentiality
- is not perfect
- is “not what our customers want”

Common perceptions of DNSSEC

DNSSEC...

- is old
- is uncool
- is dead
- is complicated to implement and to use
- is expensive
- causes outages
- burdens the Camel
- is unnecessary
- doesn't do confidentiality
- is not perfect
- is “not what our customers want”
- is unheard of (“Sorry... DNS-what?”)

Common perceptions of DNSSEC

DNSSEC...

- is old
- is uncool
- is dead
- is complicated to implement and to use
- is expensive
- causes outages
- burdens the Camel
- is unnecessary
- doesn't do confidentiality
- is not perfect
- is “not what our customers want”
- is unheard of (“Q”)

D = best of all scenarios!

Common perceptions of DNSSEC

DNSSEC...

- is old
- is uncool
- is dead
- is complicated to implement and to use
- is expensive
- causes outages
- burdens the Camel
- is unnecessary
- doesn't do confidentiality
- is not perfect
- is “not what our customers want”
- is unheard of (“Q”)
- nobody uses it anyway

= best of all scenarios!

Common perceptions of DNSSEC

DNSSEC...

- is old
- is uncool
- is dead
- is complicated to implement and to use
- is expensive
- causes outages
- burdens the Camel
- is unnecessary
- doesn't do confidentiality
- is not perfect
- is “not what our customers want”
- is unheard of (“Q”)
- = best of all scenarios!
- nobody uses it anyway
- can't be good, because if it was, it would be much better deployed

Common perceptions of DNSSEC

DNSSEC...

- is old
- is uncool
- is dead
- is complicated to implement and to use
- is expensive
- causes outages
- burdens the Camel
- is unnecessary
- doesn't do confidentiality
- is not perfect
- is “not what our customers want”
- is unheard of (“Q”)
- = best of all scenarios!
- nobody uses it anyway
- can't be good, because if it was = vicious circle
- much better deployed

DNSSEC History – Just rationality and causality?

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol, designed to guarantee the integrity of DNS answers, as a response to the by then widely felt security weakness of the DNS. DNSSEC is deemed very useful.
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t do DNSSEC, you’re not doing security right.”
- In some contexts especially, DNSSEC is peddled to everyone regardless of their technological maturity, leading to massive outages.
- From 2009: DNSSEC related outages get thoroughly documented on the IANIX website.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend.
- 2025: Secure delegations are still scarce.

DNSSEC – “No story” is ... a story ... eventually told by others

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol, designed to guarantee the integrity of DNS answers, as a response to the by then widely felt lack of security of the DNS. DNSSEC is deemed very useful.
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t do DNSSEC, you’re not doing security right.”
- In some contexts especially, DNSSEC is peddled to everyone regardless of their technological maturity, leading to massive outages.
- From 2009: DNSSEC related outages get thoroughly documented on the IANIX website.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend.
- 2025: Secure delegations are still scarce.

STORY

DNSSEC – “No story” is ... a story ... eventually told by others

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol, designed to guarantee the integrity of DNS answers, as a response to the by then widely felt lack of security of the DNS. DNSSEC is deemed very useful.  STORY
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t have DNSSEC, you’re not doing security right.”  STORY
- In some contexts especially, DNSSEC is peddled to everyone regardless of their technological maturity, leading to massive outages.
- From 2009: DNSSEC related outages get thoroughly documented on the IANIX website.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend.
- 2025: Secure delegations are still scarce.

DNSSEC – “No story” is ... a story ... eventually told by others

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol, designed to guarantee the integrity of DNS answers, as a response to the by then widely felt lack of trust in the DNS. DNSSEC is deemed very useful. **STORY**
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t have DNSSEC, you’re not doing security right.” **STORY**
- In some contexts especially, DNSSEC is peddled to mask the lack of their technological maturity, leading to massive outages. **STORY**
- From 2009: DNSSEC related outages get thoroughly documented on the IANIX website.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend. day.
- 2025: Secure delegations are still scarce.

DNSSEC – “No story” is ... a story ... eventually told by others

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol, designed to guarantee the integrity of DNS answers, as a response to the by then widely felt lack of trust in the DNS. DNSSEC is deemed very useful. **STORY**
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t have DNSSEC, you’re not doing security right.” **STORY**
- In some contexts especially, DNSSEC is peddled to mask the lack of their technological maturity, leading to massive outages. **STORY**
- From 2009: DNSSEC related outages get thoroughly documented on the IANIX website. It gets referenced to this day as a proof of DNSSEC’s unreliability.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend.
- 2025: Secure delegations are still scarce.

DNSSEC – “No story” is ... a story ... eventually told by others

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol, designed to guarantee the integrity of DNS answers, as a response to the by then widely felt lack of trust in the DNS. DNSSEC is deemed very useful. **STORY**
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t have DNSSEC, you’re not doing security right.” **STORY**
- In some contexts especially, DNSSEC is peddled to mask the lack of their technological maturity, leading to massive outages. **STORY**
- From 2009: DNSSEC related outages get thoroughly documented on the Internet. It gets referenced to this day as a proof of DNSSEC’s unreliability. **STORY**
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend.
- 2025: Secure delegations are still scarce.

DNSSEC – “No story” is ... a story ... eventually told by others

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol, designed to guarantee the integrity of DNS answers, as a response to the by then widely felt lack of trust in the DNS. DNSSEC is deemed very useful. **STORY**
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t have DNSSEC, you’re not doing security right.” **STORY**
- In some contexts especially, DNSSEC is peddled to mask the lack of their technological maturity, leading to massive outages. **STORY**
- From 2009: DNSSEC related outages get thoroughly documented on the Internet. It gets referenced to this day as a proof of DNSSEC’s unreliability. **STORY**
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend. Again, albeit sweeping and by now obsolete, it’s read and referenced to this day.
- 2025: Secure delegations are still scarce.

DNSSEC – “No story” is ... a story ... eventually told by others

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol, designed to guarantee the integrity of DNS answers, as a response to the by then widely felt lack of trust in the DNS. DNSSEC is deemed very useful. **STORY**
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t have DNSSEC, you’re not doing security right.” **STORY**
- In some contexts especially, DNSSEC is peddled to mask the lack of their technological maturity, leading to massive outages. **STORY**
- From 2009: DNSSEC related outages get thoroughly documented on the Internet. It gets referenced to this day as a proof of DNSSEC’s unreliability. **STORY**
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC trend. **STORY**
- Again, albeit sweeping and by now obsolete, it’s read and referenced.
- 2025: Secure delegations are still scarce.

DNSSEC – “No story” is ... a story ... eventually told by others

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol, designed to guarantee the integrity of DNS answers, as a response to the by then widely felt lack of trust in the DNS. DNSSEC is deemed very useful. **STORY**
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t use DNSSEC, you’re not doing security right.” **STORY**
- In some contexts especially, DNSSEC is peddled to mask the lack of their technological maturity, leading to massive outages. **STORY**
- From 2009: DNSSEC related outages get thoroughly documented on the Internet. It gets referenced to this day as a proof of DNSSEC’s unreliability. **STORY**
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC trend. Again, albeit sweeping and by now obsolete, it’s read and referenced. **STORY**
- 2025: Secure delegations are still scarce. **STORY**

DNSSEC – A history of emotions

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol, designed to guarantee the integrity of DNS answers, as a response to the by then widely felt security weakness of the DNS. DNSSEC is deemed very useful.
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t do DNSSEC, you’re not doing security right.”
- In some contexts especially, DNSSEC is peddled to everyone regardless of their technological maturity, leading to massive outages.
- From 2009: DNSSEC related outages get thoroughly documented on the IANIX website. It gets referenced to this day as a proof of DNSSEC’s unreliability.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend. Again, albeit sweeping and by now obsolete, it’s read and referenced to this day.
- 2025: Secure delegations are still scarce.

DNSSEC – A history of emotions

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol to guarantee the integrity of DNS answers, as a response to the by then growing awareness of the DNS. DNSSEC is deemed very useful.
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t do DNSSEC, you’re not doing security right.”
- In some contexts especially, DNSSEC is peddled to everyone regardless of their technological maturity, leading to massive outages.
- From 2009: DNSSEC related outages get thoroughly documented on the IANIX website. It gets referenced to this day as a proof of DNSSEC’s unreliability.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend. Again, albeit sweeping and by now obsolete, it’s read and referenced to this day.
- 2025: Secure delegations are still scarce.

SATISFACTION

DNSSEC – A history of emotions

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol to guarantee the integrity of DNS answers, as a response to the by then growing concern of the DNS. DNSSEC is deemed very useful.
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t use DNSSEC, you’re not doing security right.”
- In some contexts especially, DNSSEC is peddled to everyone regardless of their technological maturity, leading to massive outages.
- From 2009: DNSSEC related outages get thoroughly documented on the IANIX website. It gets referenced to this day as a proof of DNSSEC’s unreliability.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend. Again, albeit sweeping and by now obsolete, it’s read and referenced to this day.
- 2025: Secure delegations are still scarce.

SATISFACTION

PRIDE

DNSSEC – A history of emotions

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol to guarantee the integrity of DNS answers, as a response to the by then growing concern about the DNS. DNSSEC is deemed very useful.
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t use DNSSEC, you’re not doing security right.”
- In some contexts especially, DNSSEC is peddled to emphasize technological maturity, leading to massive outages.
- From 2009: DNSSEC related outages get thoroughly documented on the IANIX website. It gets referenced to this day as a proof of DNSSEC’s unreliability.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend. Again, albeit sweeping and by now obsolete, it’s read and referenced to this day.
- 2025: Secure delegations are still scarce.

SATISFACTION

PRIDE

DISTRESS & FACE LOSS

DNSSEC – A history of emotions

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol to guarantee the integrity of DNS answers, as a response to the by then growing concern of the DNS. DNSSEC is deemed very useful.
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t use DNSSEC, you’re not doing security right.”
- In some contexts especially, DNSSEC is peddled to emphasize technological maturity, leading to massive outages.
- From 2009: DNSSEC related outages get thoroughly documented on the Internet. It gets referenced to this day as a proof of DNSSEC’s usefulness.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-bashing trend. Again, albeit sweeping and by now obsolete, it’s read and referenced to this day.
- 2025: Secure delegations are still scarce.

SATISFACTION

PRIDE

DISTRESS & FACE LOSS

ANGER & SHAME

DNSSEC – A history of emotions

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol to guarantee the integrity of DNS answers, as a response to the by then growing concern of the DNS. DNSSEC is deemed very useful.
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t use DNSSEC, you’re not doing security right.”
- In some contexts especially, DNSSEC is peddled to emphasize technological maturity, leading to massive outages.
- From 2009: DNSSEC related outages get thoroughly documented on the Internet. It gets referenced to this day as a proof of DNSSEC’s usefulness.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-baiting trend. Again, albeit sweeping and by now obsolete, it’s read and referenced to this day.
- 2025: Secure delegations are still scarce.

SATISFACTION

PRIDE

DISTRESS & FACE LOSS

ANGER & SHAME

ANGER

DNSSEC – A history of emotions

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol to guarantee the integrity of DNS answers, as a response to the by then existing lack of the DNS. DNSSEC is deemed very useful.
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t use DNSSEC, you’re not doing security right.”
- In some contexts especially, DNSSEC is peddled to emphasize technological maturity, leading to massive outages.
- From 2009: DNSSEC related outages get thoroughly documented on the Internet. It gets referenced to this day as a proof of DNSSEC’s usefulness.
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-baiting trend.
- 2025: Secure delegations are still scarce.

SATISFACTION

PRIDE

DISTRESS & FACE LOSS

ANGER & SHAME

REVENGE

DNSSEC – A history of emotions

- 2005: The RFCs 4033, 4034 & 4035 define the DNSSEC protocol to guarantee the integrity of DNS answers, as a response to the by then existing lack of the DNS. DNSSEC is deemed very useful. **SATISFACTION**
- Enthusiasts promote DNSSEC, sending the subliminal message: “If you don’t use DNSSEC, you’re not doing security right.” **PRIDE**
- In some contexts especially, DNSSEC is peddled to emphasize technological maturity, leading to massive outages. **DISTRESS & FACE LOSS**
- From 2009: DNSSEC related outages get thoroughly documented on the Internet. It gets referenced to this day as a proof of DNSSEC’s unavailability on a major website. **ANGER & SHAME**
- 2015: a roaring blog post called “Against DNSSEC” sets a DNSSEC-baiting trend. Again, albeit sweeping and by now obsolete, it’s read and referenced to this day. **REVENGE**
- 2025: Secure delegations are still scarce. **SORROW**

DNSSEC – A history of emotions

- 2008: The DNSSEC project is initiated by the Internet Engineering Task Force (IETF).
- 2010: The DNSSEC project is approved by the IETF.
- 2011: The DNSSEC project is approved by the IETF.
- 2012: The DNSSEC project is approved by the IETF.
- 2013: The DNSSEC project is approved by the IETF.
- 2014: The DNSSEC project is approved by the IETF.
- 2015: The DNSSEC project is approved by the IETF.
- 2016: The DNSSEC project is approved by the IETF.
- 2017: The DNSSEC project is approved by the IETF.
- 2018: The DNSSEC project is approved by the IETF.
- 2019: The DNSSEC project is approved by the IETF.
- 2020: The DNSSEC project is approved by the IETF.
- 2021: The DNSSEC project is approved by the IETF.
- 2022: The DNSSEC project is approved by the IETF.
- 2023: The DNSSEC project is approved by the IETF.
- 2024: The DNSSEC project is approved by the IETF.
- 2025: The DNSSEC project is approved by the IETF.

SATISFACTION

PRIDE

DISTRESS & FACE LOSS

ANGER & SHAME

REVENGE

SORROW

Takeaways

Takeaways

- Human behaviour is often **irrational**: Non-factual factors bend people's assessment of factual matters and their perception of new developments. → **Story matters.**

Takeaways

- Human behaviour is often **irrational**: Non-factual factors bend people's assessment of factual matters and their perception of new developments. → **Story matters.**
- People have **feelings**, that will either make them behave irrationally or will remain unaddressed, both ways infringing fact-based interaction. → **Emotions matter.**

Takeaways

- Human behaviour is often **irrational**: Non-factual factors bend people's assessment of factual matters and their perception of new developments. → **Story matters.**
- People have **feelings**, that will either make them behave irrationally or will remain unaddressed, both ways infringing fact-based interaction. → **Emotions matter.**
- Thus, even in a fact-driven community like this one, **human irrationality and people's emotions are factors that need to be taken into account.**
As a consequence: **Even technical matters need storytelling.**

Takeaways

- Human behaviour is often **irrational**: Non-factual factors bend people's assessment of factual matters and their perception of new developments. → **Story matters.**
- People have **feelings**, that will either make them behave irrationally or will remain unaddressed, both ways infringing fact-based interaction. → **Emotions matter.**
- Thus, even in a fact-driven community like this one, **human irrationality and people's emotions are factors that need to be taken into account.**

As a consequence: **Even technical matters need storytelling.**

- **Tell whatever story needs to be told.** Just, don't leave it to others. And, after you started it, be alert to the versions that will be unfolding, and **react**.

Takeaways

- Human behaviour is often **irrational**: Non-factual factors bend people's assessment of factual matters and their perception of new developments. → **Story matters.**
- People have **feelings**, that will either make them behave irrationally or will remain unaddressed, both ways infringing fact-based interaction. → **Emotions matter.**
- Thus, even in a fact-driven community like this one, **human irrationality and people's emotions are factors that need to be taken into account.**

As a consequence: **Even technical matters need storytelling.**

- **Tell whatever story needs to be told.** Just, don't leave it to others. And, after you started it, be alert to the versions that will be unfolding, and **react**.
- If you face a **substantial image problem**, engage in **storytelling, and deeply so.**

DNSSEC – Tackling the image issue (at technology level)

DNSSEC – Tackling the image issue (at technology level)

- make DNSSEC simpler by automation

DNSSEC – Tackling the image issue (at technology level)

- make DNSSEC simpler by automation



DNSSEC – Tackling the image issue (at technology level)

- make DNSSEC simpler by automation



- design reliable automation to handle multi-signer setups and DS updates, in close coordination with the involved parties

DNSSEC – Tackling the image issue (at technology level)

- make DNSSEC simpler by automation



- design reliable automation to handle multi-signer setups and DS updates, in close coordination with the involved parties
 - Peter Thomassen: “Towards an Industry Best Practice for DS Automation”
<https://indico.dns-oarc.net/event/55/contributions/1180/>

DNSSEC – Tackling the image issue (at discourse level)

DNSSEC – Tackling the image issue (at discourse level)

- provide updated information on DNSSEC's actual state of the art
(→ press articles, conference talks, podcast episodes)

DNSSEC – Tackling the image issue (at discourse level)

- provide updated information on DNSSEC's actual state of the art
(→ press articles, conference talks, podcast episodes)
 - put outdated publications into perspective

DNSSEC – Tackling the image issue (at discourse level)

- provide updated information on DNSSEC's actual state of the art
(→ press articles, conference talks, podcast episodes)
 - put outdated publications into perspective
 - communicate in a balanced, non-evangelizing way, allowing people to make informed decisions about whether they should use DNSSEC

DNSSEC – Tackling the image issue (at discourse level)

- provide updated information on DNSSEC's actual state of the art (→ press articles, conference talks, podcast episodes)
 - put outdated publications into perspective
 - communicate in a balanced, non-evangelizing way, allowing people to make informed decisions about whether they should use DNSSEC
- reach out to the community by injecting lightheartedness and self-deprecating fun into the talk on DNSSEC (→ [pecha kucha](#) at IETF conferences, talks like this one, social media items, such as Fakebook on DNSSEC history, memes etc.)

Look what I got for you:



**a new RFC with an updated
list of RFCs listing RFCs
about DNSSEC!!!**

Outlook

- We won't start DNSSEC afresh. But, with automation, there is a chance to make DNSSEC more widely available and manageable.
- Let's make use of this chance and try not to fall back into missionary black-or-white statements that have done no good.
- As DNSSEC can't afford any more damage to its image, let's work on the DS automation guidance with the scope to eliminate every possible source of breakage.
- And, once in a while, let's have a good laugh about all this.

Thank you!

— — —

Questions?
Comments?
Ideas?

Thank you!

Questions?
Comments?
Ideas?

If you like what you saw, stay in the loop on:

- [LinkedIn](#)
- [X](#)
- [Mastodon](#)
- [Bluesky](#)
- [Reddit](#)
- [YouTube](#)