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Class: CSCE 463

**Report HW2**

* 1. **random0.irl**: jump into fixed header

Look up : random0.irl

Query : random0.irl, type 1, TXID 0x0001

Server : 128.194.135.82

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Attempt 0 with 29 bytes... response in 1 ms with 82 bytes

TXID 0x0001, flags, 0x8400, questions 1, answers 2, authority 0, additional 0

succeeded with Rcode = 0

------------ [questions] ----------

random0.irl type 1 class 1

------------ [answers] ------------

++ invalid record: jump into fixed header



* 1. **random3.irl**: smaller than fixed header

Look up : random3.irl

Query : random3.irl, type 1, TXID 0x0001

Server : 128.194.135.82

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Attempt 0 with 29 bytes... response in 0 ms with 7 bytes

++ invalid reply: smaller than fixed header



* 1. **random5.irl**: jump beyond packet boundary

Look up : random5.irl

Query : random5.irl, type 1, TXID 0x0001

Server : 128.194.135.82

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Attempt 0 with 29 bytes... response in 0 ms with 71 bytes

TXID 0x0001, flags, 0x8400, questions 1, answers 2, authority 0, additional 0

succeeded with Rcode = 0

------------ [questions] ----------

random5.irl type 1 class 1

------------ [answers] ------------

random.irl A 1.1.1.1 TTL = 30

++ invalid record: jump beyond packet boundary



* 1. **random6.irl**: jump loop

Look up : random6.irl

Query : random6.irl, type 1, TXID 0x0001

Server : 128.194.135.82

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Attempt 0 with 29 bytes... response in 0 ms with 59 bytes

TXID 0x0001, flags, 0x8400, questions 1, answers 2, authority 0, additional 0

succeeded with Rcode = 0

------------ [questions] ----------

random6.irl type 1 class 1

------------ [answers] ------------

++ invalid record: jump loop



1. **random1.irl**: not enough records

Look up : random1.irl

Query : random1.irl, type 1, TXID 0x0001

Server : 128.194.135.82

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Attempt 0 with 29 bytes... response in 15 ms with 468 bytes

TXID 0x0001, flags, 0x8600, questions 1, answers 1, authority 0, additional 65

535

succeeded with Rcode = 0

------------ [questions] ----------

random1.irl type 1 class 1

------------ [answers] ------------

random.irl A 1.1.1.1 TTL = 30

------------ [additional] ---------

Episode.IV A 2.2.2.2 TTL = 30

A.NEW.HOPE A 2.2.2.2 TTL = 30

It.is.a.period.of.civil.war A 2.2.2.2 TTL = 30

Rebel.spaceships A 2.2.2.2 TTL = 30

striking.from.a.hidden.base A 2.2.2.2 TTL = 30

have.won.their.first.victory A 2.2.2.2 TTL = 30

against.the.evil.Galactic.Empire A 2.2.2.2 TTL = 30

During.the.battle A 2.2.2.2 TTL = 30

Rebel.spies.managed A 2.2.2.2 TTL = 30

to.steal.secret.plans A 2.2.2.2 TTL = 30

to.the.Empires.ultimate.weapon A 2.2.2.2 TTL = 30

++ invalid section: not enough records



1. **random7.irl**: truncated jump offset

Look up : random7.irl

Query : random7.irl, type 1, TXID 0x0001

Server : 128.194.135.82

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Attempt 0 with 29 bytes... response in 0 ms with 42 bytes

TXID 0x0001, flags, 0x8400, questions 1, answers 2, authority 0, additional 0

succeeded with Rcode = 0

------------ [questions] ----------

random7.irl type 1 class 1

------------ [answers] ------------

++ invalid record: truncated jump offset



1. **random4.irl**: truncated name, truncated fixed RR header, value length beyond packet

Look up : random4.irl

Query : random4.irl, type 1, TXID 0x0001

Server : 128.194.135.82

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Attempt 0 with 29 bytes... response in 0 ms with 290 bytes

TXID 0x0001, flags, 0x8400, questions 1, answers 1, authority 0, additional 11

succeeded with Rcode = 0

------------ [questions] ----------

random4.irl type 1 class 1

------------ [answers] ------------

random.irl A 1.1.1.1 TTL = 30

------------ [additional] ---------

Episode.IV A 2.2.2.2 TTL = 30

A.NEW.HOPE A 2.2.2.2 TTL = 30

It.is.a.period.of.civil.war A 2.2.2.2 TTL = 30

Rebel.spaceships A 2.2.2.2 TTL = 30

striking.from.a.hidden.base A 2.2.2.2 TTL = 30

have.won.their.first.victory A 2.2.2.2 TTL = 30

++ invalid record: truncated name



Look up : random4.irl

Query : random4.irl, type 1, TXID 0x0001

Server : 128.194.135.82

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Attempt 0 with 29 bytes... timeout in 10000 ms

Attempt 1 with 29 bytes... response in 0 ms with 305 bytes

TXID 0x0001, flags, 0x8400, questions 1, answers 1, authority 0, additional 11

succeeded with Rcode = 0

------------ [questions] ----------

random4.irl type 1 class 1

------------ [answers] ------------

random.irl A 1.1.1.1 TTL = 30

------------ [additional] ---------

Episode.IV A 2.2.2.2 TTL = 30

A.NEW.HOPE A 2.2.2.2 TTL = 30

It.is.a.period.of.civil.war A 2.2.2.2 TTL = 30

Rebel.spaceships A 2.2.2.2 TTL = 30

striking.from.a.hidden.base A 2.2.2.2 TTL = 30

have.won.their.first.victory A 2.2.2.2 TTL = 30

++ invalid record: truncated fixed RR header



Look up : random4.irl

Query : random4.irl, type 1, TXID 0x0001

Server : 128.194.135.82

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Attempt 0 with 29 bytes... response in 0 ms with 348 bytes

TXID 0x0001, flags, 0x8400, questions 1, answers 1, authority 0, additional 11

succeeded with Rcode = 0

------------ [questions] ----------

random4.irl type 1 class 1

------------ [answers] ------------

random.irl A 1.1.1.1 TTL = 30

------------ [additional] ---------

Episode.IV A 2.2.2.2 TTL = 30

A.NEW.HOPE A 2.2.2.2 TTL = 30

It.is.a.period.of.civil.war A 2.2.2.2 TTL = 30

Rebel.spaceships A 2.2.2.2 TTL = 30

striking.from.a.hidden.base A 2.2.2.2 TTL = 30

have.won.their.first.victory A 2.2.2.2 TTL = 30

against.the.evil.Galactic.Empire A 2.2.2.2 TTL = 30

During.the.battle A 2.2.0.204 TTL = 30

++ invalid record: value length beyond packet

**5. Extra credit:**

For random8.irl, the server selects a random position within the packet body and then adds multiple ‘lol’ (6c 6f 6c) into that location.