Usecase and Requirements for new XFRMI

a secunet's point of view

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Usecase

Requirements

- environment with multiple security domains
- seperation via network name spaces
- only 1 kind of transition between NetNS allowed
- ensure encryption or drop it
- simplify routing

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Usecase

Solution

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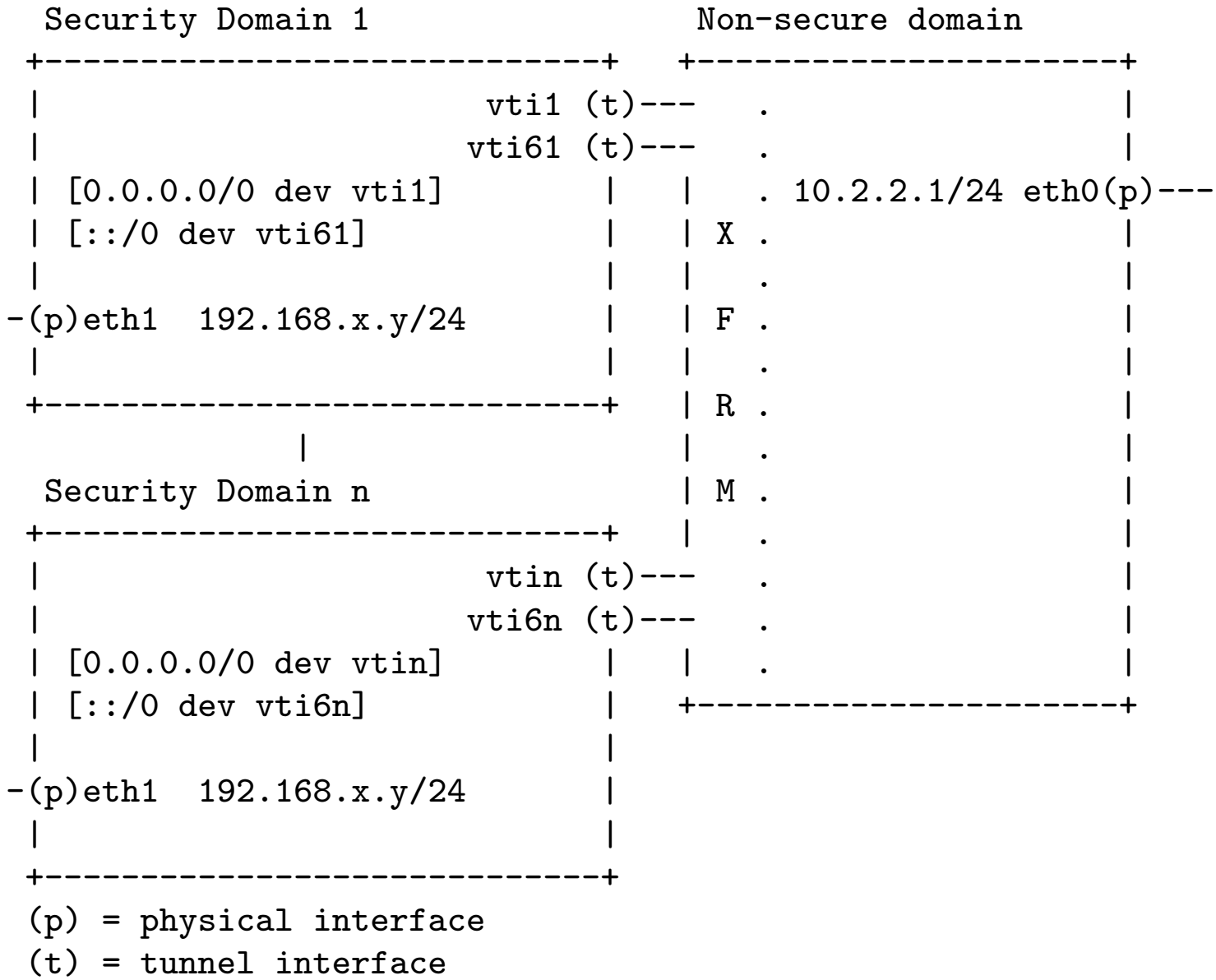
Usecase

Solution

- VTIs

Usecase

Overview



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Shortcomings

VTIs are not the answer

- 2 VTIs per NetNS needed $\rightarrow$ IPv4 + IPv6
- only 1 wildcard interface possible
- it's all done by the host $\rightarrow$ slow

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Resulting Requirements for new XFRMI

Whishlist

- XFRM should be enforced
- Interfamily support → IPv4 + IPv6 through one interface
- multiple XFRMI with address *any*
- performace → offloading support

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