

FirstMILE security alerts

Automating the alerts into MILE

IETF 95

Buenos Aries, AR

April 5, 2016

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draft-moskowitz-firstmile-00.txt

What is the problem?

- No standard input of security alerts/reports into the MILE environment
 - Currently a collection of proprietary management systems and cut and paste into MILE
- Reporting security events may occur at times where the networks is under attack
 - See `draft-ietf-dots-requirements-01.txt`

What is needed

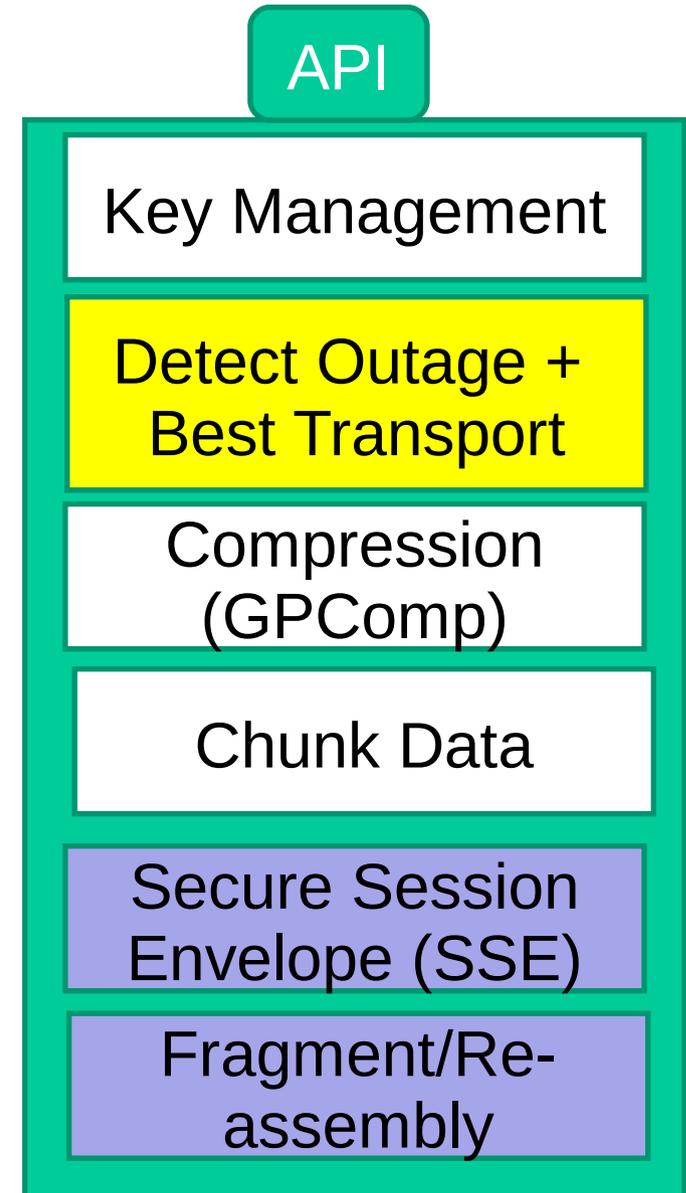
- A sub/pub reporting system
 - A security monitor subscribes to a security defense system for selected reports
 - The security defense system publishes events to all subscribed monitors
- But first needs a registration of defense system to monitor(s)
 - Support business model of ISP security monitor(s)
 - Establish trust between defense and monitor systems

Why does firstMILE use SSLS

- Same arguments as for DOTS
 - SSE moves the security context within the messaging, reducing the attack surface
 - Though does not need the bi-directionality that DOTS requires
 - But Subscribe process may be viewed as adding bi-directional

Why does firstMILE use SSLS

- If Sub process uses NETCONF
 - Use Chunking to packetize structure XML
 - Use Compression to reduce chunks
 - Same as I2RS



Compare to mile-xmpp-grid

- Mile-xmpp-grid is more extensive
- But
 - Use of TCP and TLS does not reflect the network conditions during an attack
- FirstMILE can be a communication service for mile-xmpp-grid to use
 - SSLS provides the transport uncoupling and message layer security desired.
- Xmpp can be the sub/pub function used

Next steps

- Either
 - Develop registration and sub/pub in firstMILE
- Or
- Work with mile-xmpp-grid to merge documents

DISCUSSION