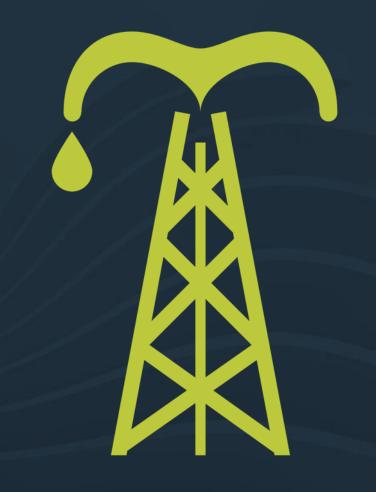




Data is the new oil

"Data is the new oil. It's valuable, but if unrefined it cannot really be used. It has to be changed into gas, plastic, chemicals, etc to create a valuable entity that drives profitable activity; so must data be broken down, analyzed for it to have value."

Clive Humby, UK Mathematician and architect of Tesco's Clubcard, 2006





The Data Pond in NonStop







- SIEM
- Fraud Detection
- Machine Learning / Al
- Forensic Searching
- Business Intelligence







The Data Bridge



- Secure Integration to cloud based Applications
- And On-Prem
- Microservice Based Integrations
- Data propagation to cloud



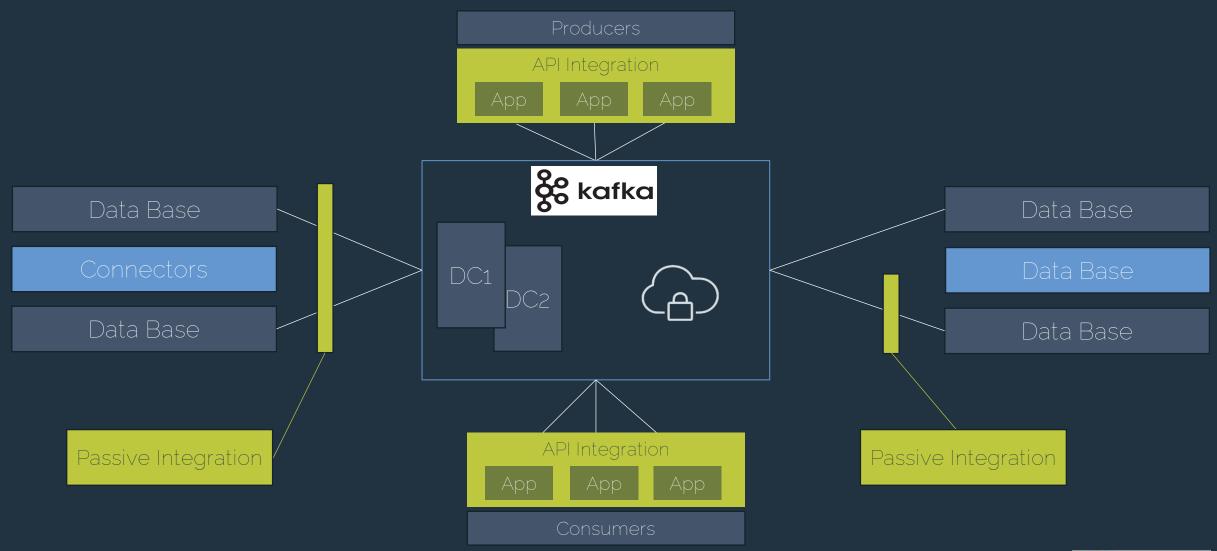


A Potential Pipeline





SecurDPS Kafka Integration Overview





Potential Uses

Machine Learning

Data Visualisation

Alerting

Monitoring

SIEM Functions

Forensic Investigation





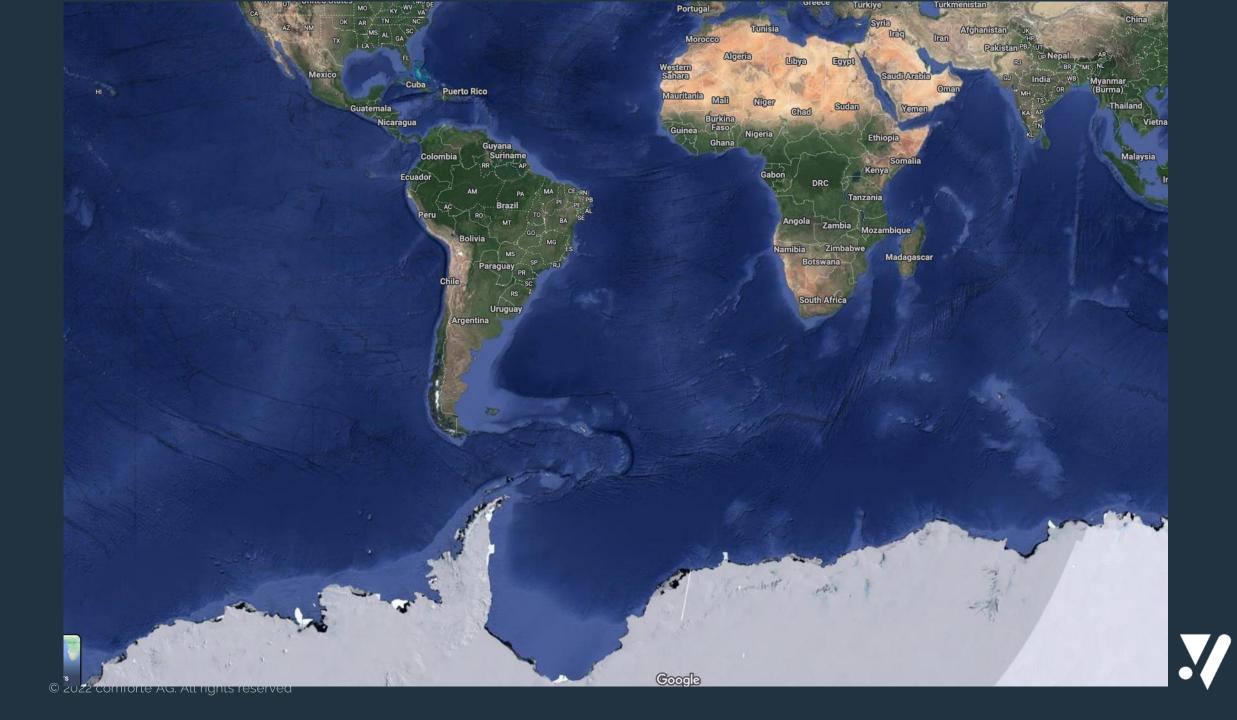






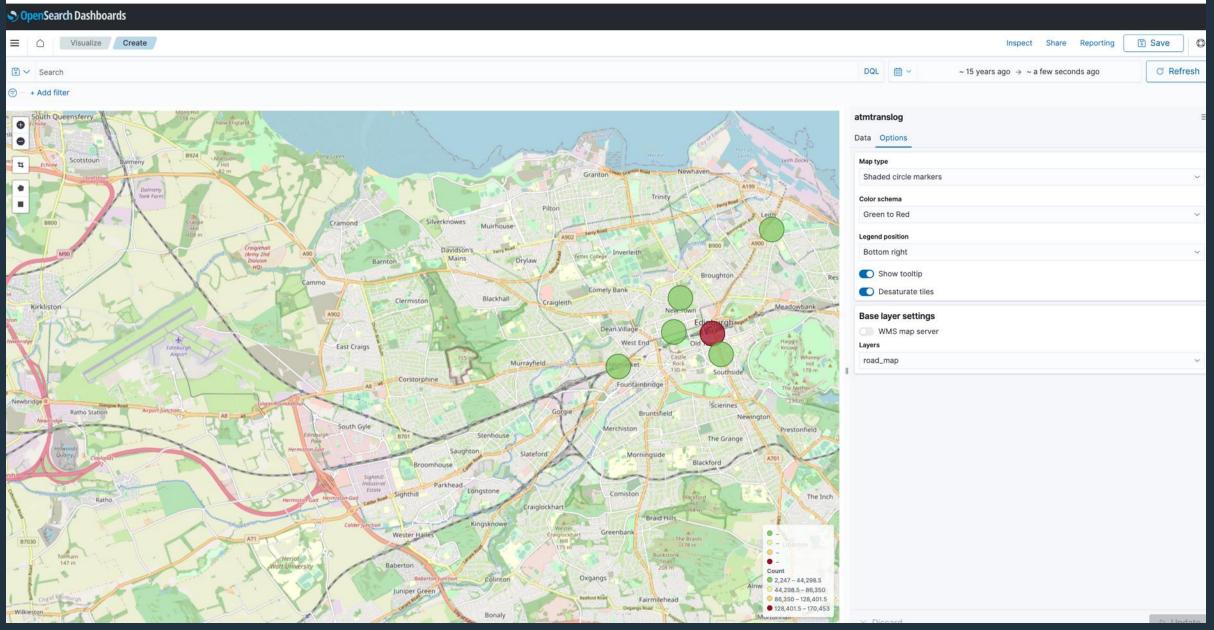




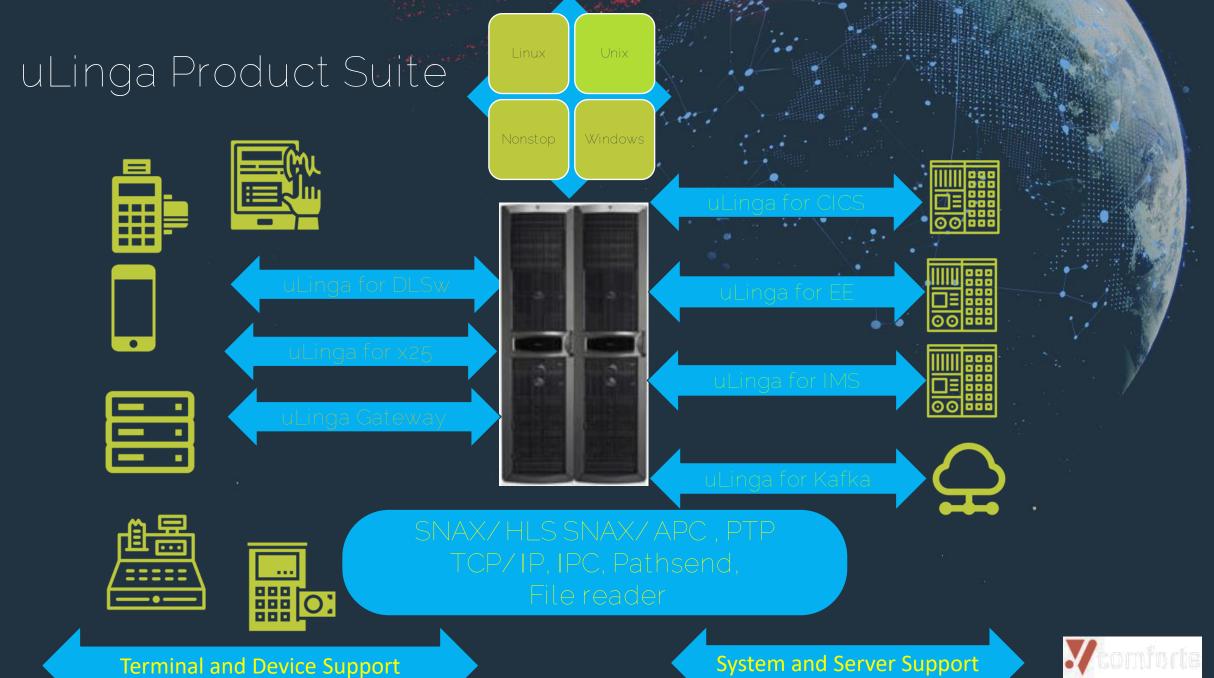


OpenSearch Dashboards 0 Discover Save Open Share Reporting Inspect Search DQL Last 1 year Show dates C Refresh = + Add filter € atmtranslog ~ **554,800** hits Q Search field names Mar 30, 2022 @ 07:54:08.784 - Mar 30, 2023 @ 07:54:08.784 Auto 0 Filter by type 25000 Selected fields 20000 source 15000 Available fields 10000 5000 Popular location 2022-04-01 2022-05-01 2022-06-01 2022-07-01 2022-08-01 2022-09-01 2022-10-01 2022-11-01 2022-12-01 2023-01-01 2023-02-01 2023-03-01 t _id **TXNDATE** per week t _index Time . _source # _score > Aug 31, 2022 @ 01:59:49.000 TXNDATE: Aug 31. 2022 @ 01:59:49.000 TRCATI: BAN0001 TRTRTY: 4 TRCRDNUM: 400050******4826 TRTRN: 4,000 TRRSPC: 00 BIN: 400050 Owner: Binkleys Issuer_type: Debit t _type Scheme: VISA issuer_country_code: 826 Foreign_Card: false ONUS: true DISPENSE: true termid: BAN0001 seqno: 9.99,120,300,153,639e-309 ROUTE: ONUS Approved: true t Address RETRACT: false Responsecode: 00 Responsetext: Approved and completed successfully Networkoutflag: false carderrorflag: false CODE: TXN-ON-US ncard1hr: 1 Approved ncard1hrapproved: 1 ncard1hrdenied: - nATM1hr: 5 nATM1hrapproved: 5 nATM1hrdenied: - thour: 23 tday: 3 tquarter: 95 campaign: 2 Address: Kalliness, Weisdale, t BIN Shetland ZE2 9LQ, United Kingdom description: ATM lat: 60.233 long: -1.301 location: 60.2334559,-1.3012263 terminaldatetime: 2022-08-30 23:59:49 _id: zAg0HocBBS9nmWdr8w1y # campaign > Aug 31, 2022 @ 01:59:32.000 TXNDATE: Aug 31, 2022 @ 01:59:32.000 TRCATI: BAN0026 TRTRTY: 4 TRCRDNUM: 482604******0919 TRTRN: 16,000 TRRSPC: 00 BIN: 482604 Owner: TCZ Issuer_type: Debit carderrorflag Scheme: MasterCard issuer_country_code: 826 Foreign_Card: false DNUS: false DISPENSE: true termid: BAN0026 segno: 9.99,120,300,153,639e-309 ROUTE: LOCAL SWITCH t CODE Approved: true RETRACT: false Responsecode: 00 Responsetext: Approved and completed successfully Networkoutflag: false carderrorflag: false CODE: TXN-NOT-ON-US t description ncard1hr: 2 ncard1hrapproved: 2 ncard1hrdenied: - nATM1hr: 35 nATM1hrapproved: 27 nATM1hrdenied: - thour: 23 tday: 3 tquarter: 95 campaign: 2 Address: Edinburgh DISPENSE South Bridge Local, 79 South Bridge, Edinburgh EH1 1HN, United Kingdom description: ATM lat: 55.949 long: -3.187 location: 55.9485946,-3.1869337 terminaldatetime: 2022-Foreign_Card > Aug 31, 2022 @ 01:59:28.000 TXNDATE: Aug 31, 2022 @ 01:59:28.000 TRCATI: BAN4025 TRTRTY: 29 TRCRDNUM: 544000******2257 TRTRN: 8,000 TRRSPC: 00 BIN: 544000 Owner: Lithuania Issuer_type: Debit # issuer_country_code Scheme: MasterCard issuer_country_code: 440 Foreign_Card: true ONUS: false DISPENSE: true termid: BAN4025 segno: 9.99,120,300,153,639e-309 ROUTE: MasterCard t Issuer_type Approved: true RETRACT: false Responsecode: 00 Responsetext: Approved and completed successfully Networkoutflag: false carderrorflag: false CODE: TXN-NOT-ON-US # lat ncard1hr: 1 ncard1hrapproved: 1 ncard1hrdenied: - nATM1hr: 4 nATM1hrdenied: - thour: 23 tday: 3 tquarter: 95 campaign: 2 Address: 95 Charleston Dr, Dundee DD2 2HB, United Kingdom description: ATM lat: 56.47 long: -3.025 location: 56.4699064, -3.0251529 terminaldatetime: 2022-08-30 23:59:28 # long







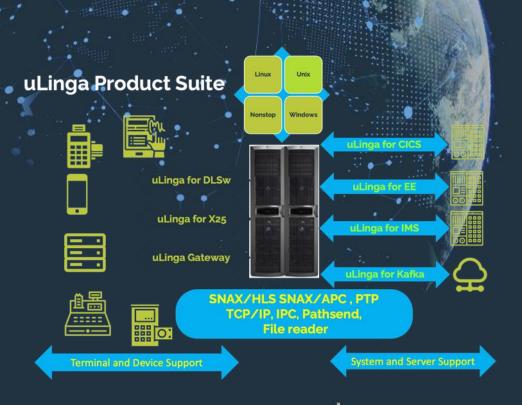


System and Server Support



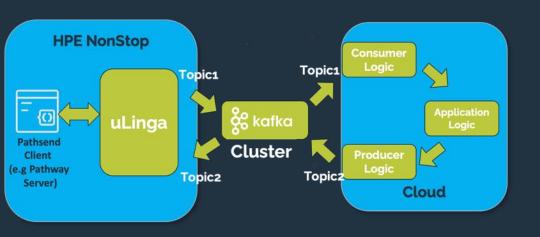
uLinga Features

- Uses Industry Standard Protocols incl. TCP/IP, HTTP
- Simplified Management IP end to end allows for easier problem determination
- Extensive security options (e.g. SSL/TLS, IPSEC)
- Modern intuitive web-based graphical user interface (WebCon)
- RESTful interface for command, control and metrics
- Provides a wide range of APIs to support any application
- Extensive inbuilt tracing and logging
- Completely multi-platform NonStop, Linux, Unix and Windows





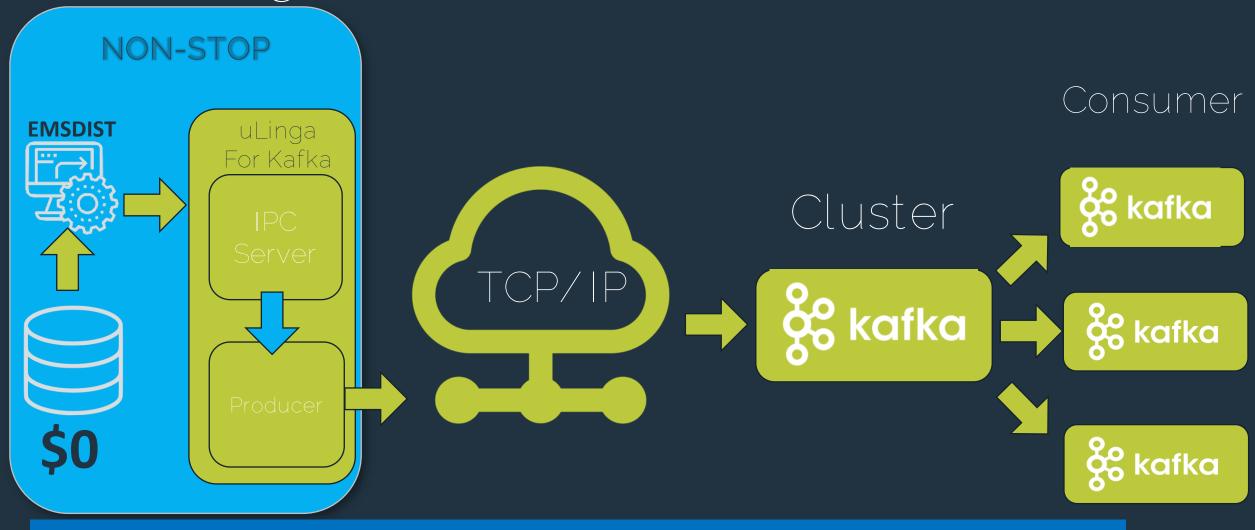
uLinga for Kafka



- uLinga for Kafka acts as a Kafka Producer and Kafka Consumer
- Supports native Kafka wire protocols, meaning no additional software required
- No single point of failure
- Runs like any other uLinga product
- Proven uLinga architecture can handle massive data throughput - >20,000TPS on a single NS X3 processor, with submillisecond latency



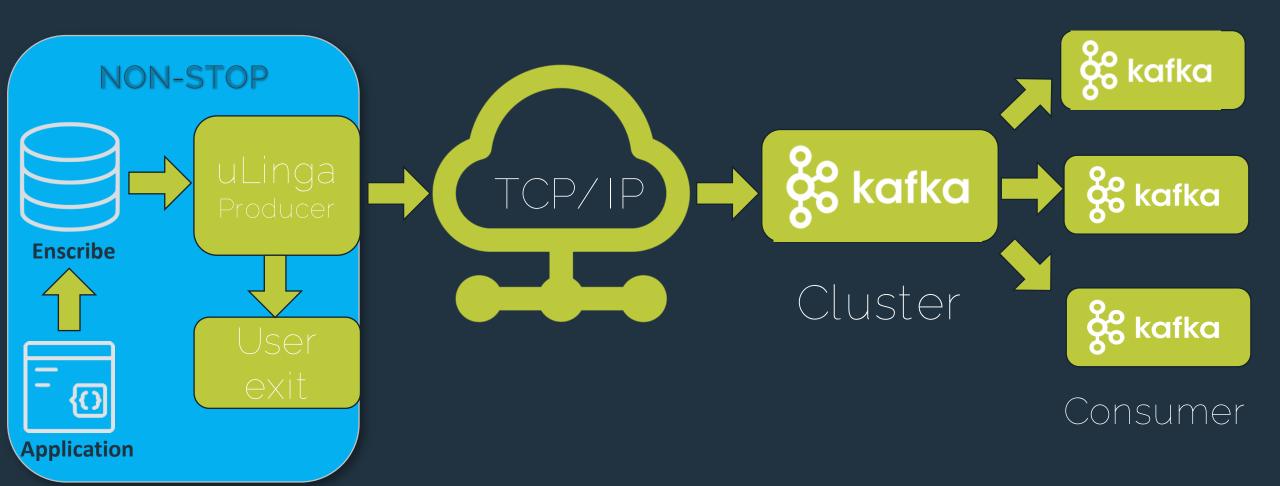
Streaming EMS Events to Kafka



TACL> EMSDIST /NOWAIT/ COLLECTOR \$0, TYPE PRINTING, TEXTOUT \$ULKAF. #KAFKA1

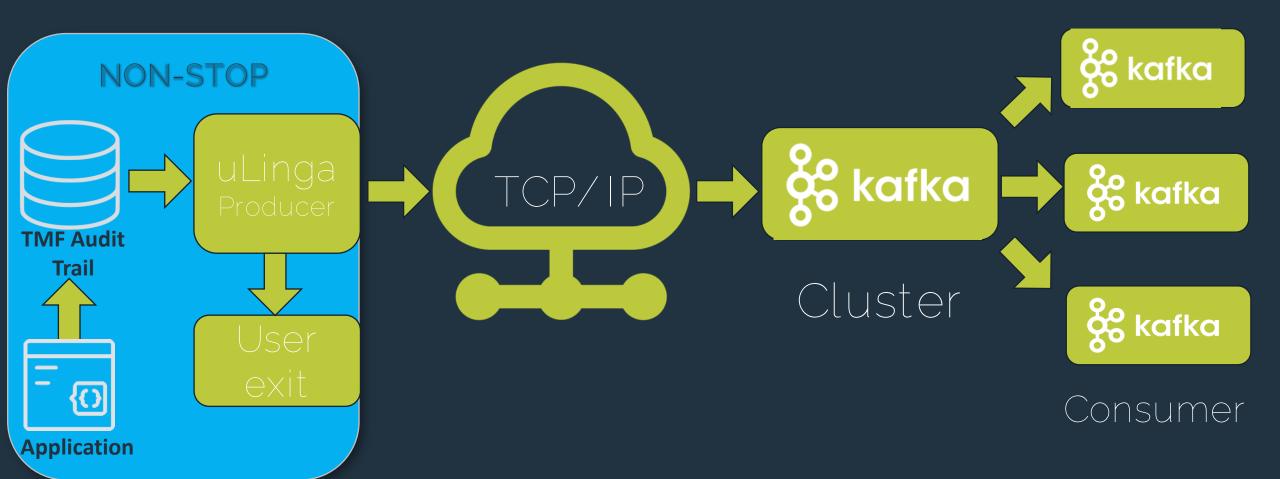


Enscribe Support - Producer





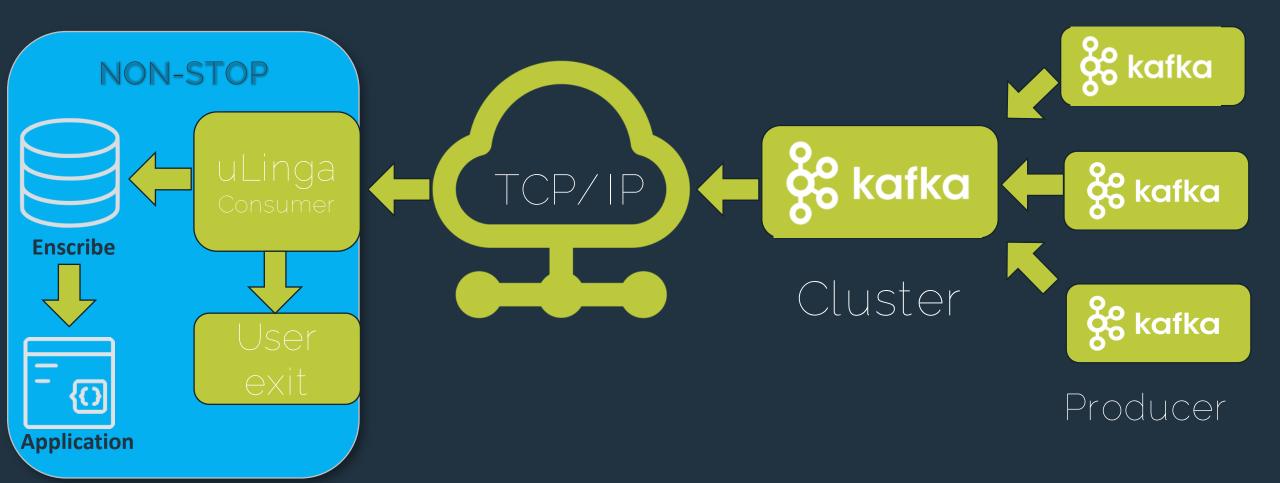
TMF Audit Trail (Enscribe & SQL/MP)- Producer



New ENSCRIBE intercept libriary

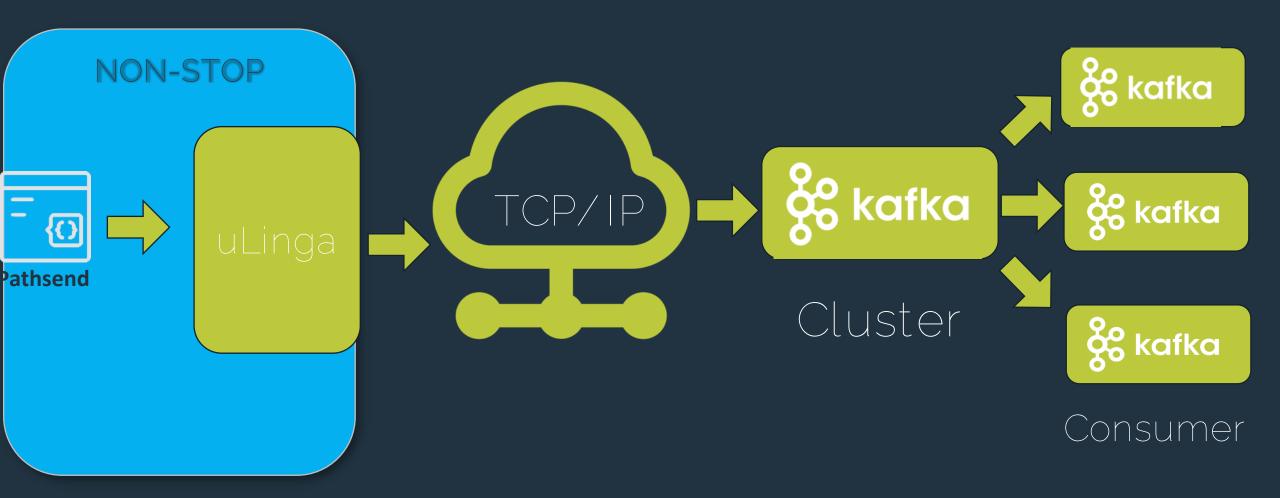


Enscribe Support - Consumer



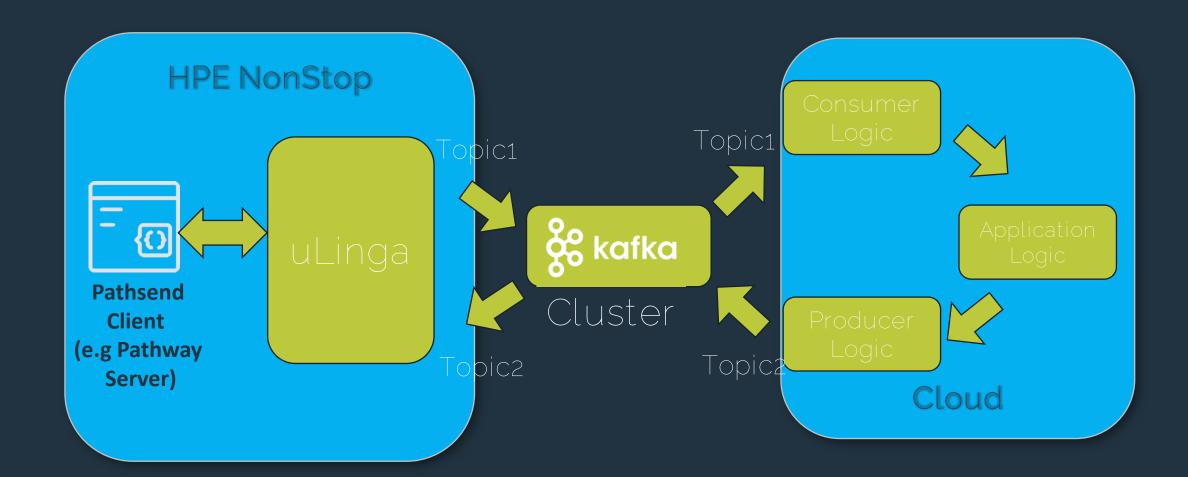


Pathsend / IPC support





Produce Consume - Example





uLinga for Kafka – Additional Features

- Authentication with SASL-SCRAM
- Kafka Exactly Once Semantics (EOS)
- Configurable batching support can increase throughput, depending on application requirements
- Compression support
- Integration with securDPS



uLinga for Kafka – Summary

- uLinga for Kafka provides:
 - Excellent performance, written in C, with no additional components required
 - All the advantages of other uLinga products
 - Support for both Kafka Producer and Consumer functionality
 - Produce/Consume can be paired to provide high performance request/response processing
 - Variety of mechanisms to send/receive data to and from Kafka cluster
 - User exits for custom manipulation of data
 - Integration with SecurDPS





Summary



- Secure Integration to cloud based Applications
- Open up more actionable data
- Enrich data for greater utilisation
- Provide secure transmission and storage of data











