

## AWS F1 HYPERSCALE FILE SCAN AND LOGFILE ANALYTICS ACCELERATION



Hyperion F1 10G RegEx File scan is a high-performance Regular Expression (RegEx) offload accelerator designed for AWS F1 in-cloud FPGA technology using Virtual Appliance marketplace. Optimised for the Amazon cloud fabric, Hyperion F1 10G RegEx File scan takes advantage of elastic scaling enabling data analytics acceleration up to hundreds of Petabytes of data.

The solution is comprised of a 10G Helios IP core image configured easily via a web-based client application and the Software Development Kit (SDK) allows direct integration of offload acceleration within customer application using Hyperion F1 API.

### KEY FEATURES.....

- ❖ A cloud-based RegEx solution for scanning files at speeds of up to 10Gb/s
- ❖ Optimised for file scanning using 16KB jobs
- ❖ Elastically scalable offload up to Petabyte file size
- ❖ Supports up to 1M RegEx rules using external DDR4
- ❖ Supports POSIX/PCRE compatible regular expressions
- ❖ Comprehensive SDK including:
  - RXP Compiler
  - Application Programming Interface (API) for plugin development
  - Reference applications
  - Utilities
- ❖ Also available as a licensable IP block called Helios F1

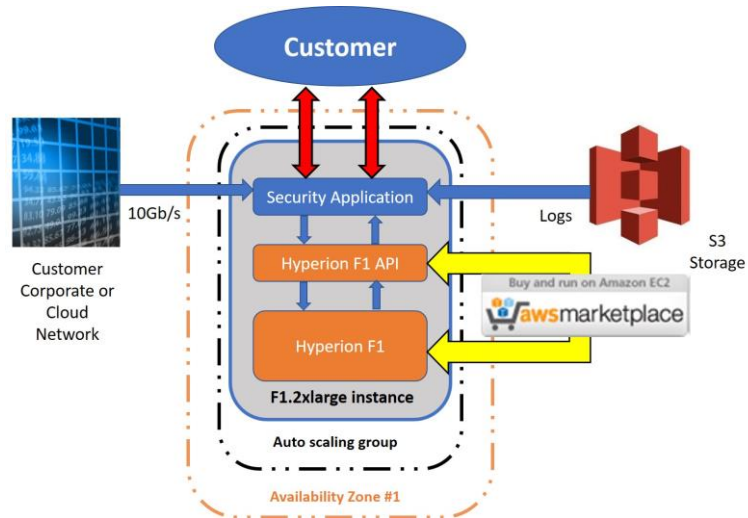
### KEY BENEFITS.....

- ❖ Easy Pay-As-You-Go set up via AWS Marketplace
- ❖ Integrated within the AWS F1 infrastructure taking advantage of the AWS cloud fabric (computing, network and storage)
- ❖ Offload of data analytic functions from host CPU freeing up CPU cores and saving costs
- ❖ Customers can compile their own regular expressions dataset for customisable searches.

## APPLICATIONS.....

- ❖ Security Analytics Acceleration (SAA)
- ❖ Security log analytics offload to accelerate Security Information and Event Management (SIEM) tools.
- ❖ Security forensics acceleration
- ❖ File scanning
- ❖ Rule-based analytics of massive datasets (>Petabytes) to filter and extract relevant data
- ❖ Advanced auditing and policing of user/application security policies
- ❖ Data Mining

## BLOCK DIAGRAM.....



## CAPABILITIES & RESOURCES.....

Hyperion F1 10G RegEx File scan is optimised for the F1.2xlarge instance. Launch the solution on <https://aws.amazon.com/marketplace>

	f1.2xLarge
Network bandwidth	10Gb/s
Total vCPUs per instance	8
Number of vCPUs for 10Gb/s throughput	1-2 + Xilinx VU9P
Number of vCPUs available for client application	6-7
RegEx Support	up to 1M

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