

HYPERION F1 10G REGEX FILE SCAN

HYPERSCALE FILE SCANNING & LOGFILE ANALYTICS ACCELERATION ON AWS F1

Access Titan's flexible, customizable RXP (Regular eXpression Processor) on the AWS EC2 F1 FPGA



Develop high end search and scan applications on an Amazon FPGA image

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.

Optimized 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.

Process 1TB of data with up to 800K user defined regular expressions at high speeds

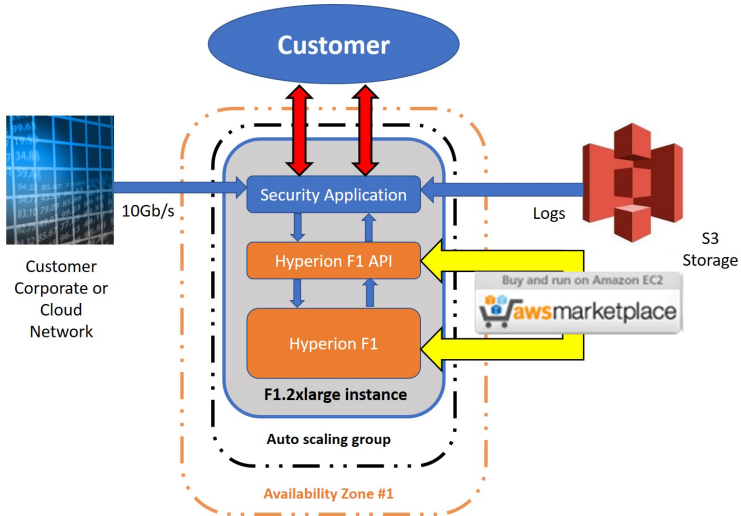
HIGHLIGHTS.....

- **Accelerated Throughput** - cloud-based RegEx solution for scanning files at speeds of up to 10Gb/s
- **Complex String Matching** - for data analytics and file scanning using 16KB jobs
- **High Capacity Content Analysis** - supports up to 1 million RegEx rules using external DDR4
- **High Scalability** - elastically scalable offload up to Petabyte file size
- **CPU Offload** - offload of data analytic functions from host CPU freeing up CPU cores and saving costs
- **Easy Compatibility** - supports POSIX/PCRE compatible regular expressions to detect malware, enforce blacklists and run Snort or customer-defined RegEx datasets
- 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)

APPLICATIONS.....

- Acceleration of security analytics and forensics
- Security log analytics offload to accelerate Security Information and Event Management (SIEM) tools.
- File scanning, data mining and rule-based analytics of massive datasets (>Petabytes)
- Advanced auditing and policing of user/application security policies

BLOCK DIAGRAM



CAPABILITIES & RESOURCES.....

The **Hyperion F1 solution** comprises:

- a 10Gb/s Helios IP core image easily configured via a web-based client application
- Software Development Kit (SDK) allowing direct integration of offload acceleration using Hyperion F1 API

The comprehensive SDK includes:

- RXP Compiler
- Application Programming Interface (API) for plugin development
- Reference applications

Hyperion F1 10G RegEx File scan is optimized 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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