FORCEPOINT

Datasheet

Forcepoint Data Guard

Secure data and file transfer between physically separated networks

Connecting the "unconnectable"

The persistent threat of cyberattacks, penetration, and data loss require that only the most secure methods are used to maintain the highest standards of security, particularly in highly regulated industries. Many organizations struggle with how to balance protecting sensitive data while at the same time utilizing cutting-edge collaboration and automation technologies. The common approach many organizations take is to separate sensitive data and networks from information technology systems and the internet. This is a good security practice, but on its own can leave systems vulnerable and prevent adoption of automation and cloud-based technologies.

Forcepoint Data Guard

Forcepoint Data Guard delivers this balance by enabling highly complex, bi-directional, automated data and file transfers between physically separated networks.

To provide defense-grade data control at scale, Data Guard leverages a trusted operating system and security policies that enforce role and process separation and isolation for automated, byte-level content inspection and sanitization, with customizable rules to handle even the most specialized data types and protocols.

Supporting today's security paradigms

Data Guard enables secure data and file (structured and unstructured data) movement between segmented networks in uni-, bi-, or multi-directional fashion. The trusted operating system foundation derived from Red Hat Enterprise Linux with enhanced SELinux modules allows Data Guard to be used in highly regulated environments.

Ready for tomorrow's challenges

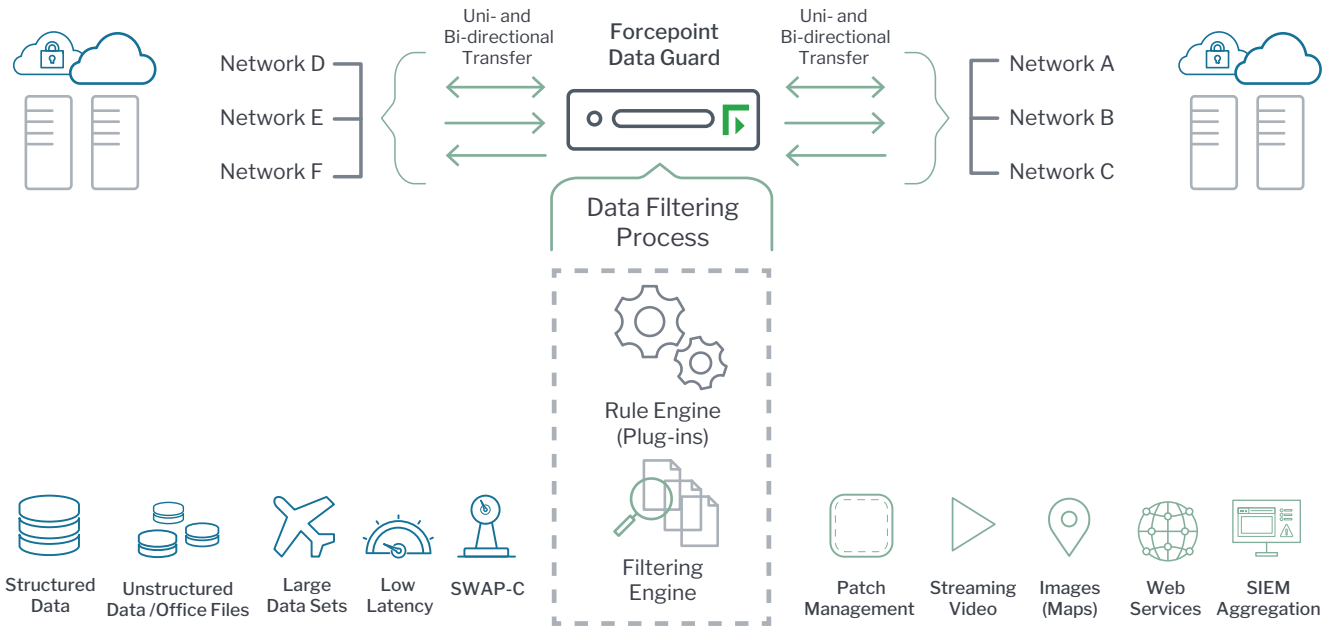
Data Guard is designed to evolve as the demands on your environment change. Thanks to its highly flexible and customizable rule- and policy-based structure, Data Guard ensures an enterprise's ability to monitor and control any future data types and devices.

Data Guard was designed for highly regulated environments such as government, military, critical infrastructure, law enforcement, and any other environment that must:

- Move sensitive data between separated networks
- Adhere to strict regulations for devices that move data between networks
- Utilize non-standard or non-typical data types and formats

Key benefits

- **High performance transfer** sustains up to 8.5 Gbps (TCP), 5 Gbps (UDP), 6 Gbps (HTTPS) and secure file movement up to 200Gb/hr
- Provides **highly customizable** data validation rules for maximum flexibility rather than static, one-size-fits-all policies
- **Flexible** software implementation for all environments: datacenter to SOC and meets austere, ruggedized SWAP-C requirements
- Enables **real-time video streaming** while providing unparalleled control and auditing
- Content **disarm and reconstruction** capabilities
- **Customer maintainable** for simplified configuration and management
- **Common Criteria** "In Process" for EAL 4+



A flexible approach

Data Guard is highly flexible in its secure approach to high assurance data movement through the robust security policies within adaptors, plugins, and the filtering process. The rule engine provides APIs to handle rich data types including: HTTP header, JSON, SOAP, MIME, compression, HTML, XML, file sanitization for Office, PDF, and images, streaming data, and the flexibility to secure most TCP and UDP protocols.

Filtering process

The Forcepoint Data Guard filtering process consists of built-in filtering capabilities: Rule Engine (plugins) and the Filtering Rules. Each capability provides consistent policy enforcement across all adaptors. Instead of pre-packaged point-and-click policies, the filtering process supports full customization of inspection capabilities that enable the creation of complex security policies. This allows specific inspections and constraints for each deployment rather than generic controls based on file type. Almost any security policy can be expressed through the user-configurable LUA interface language.

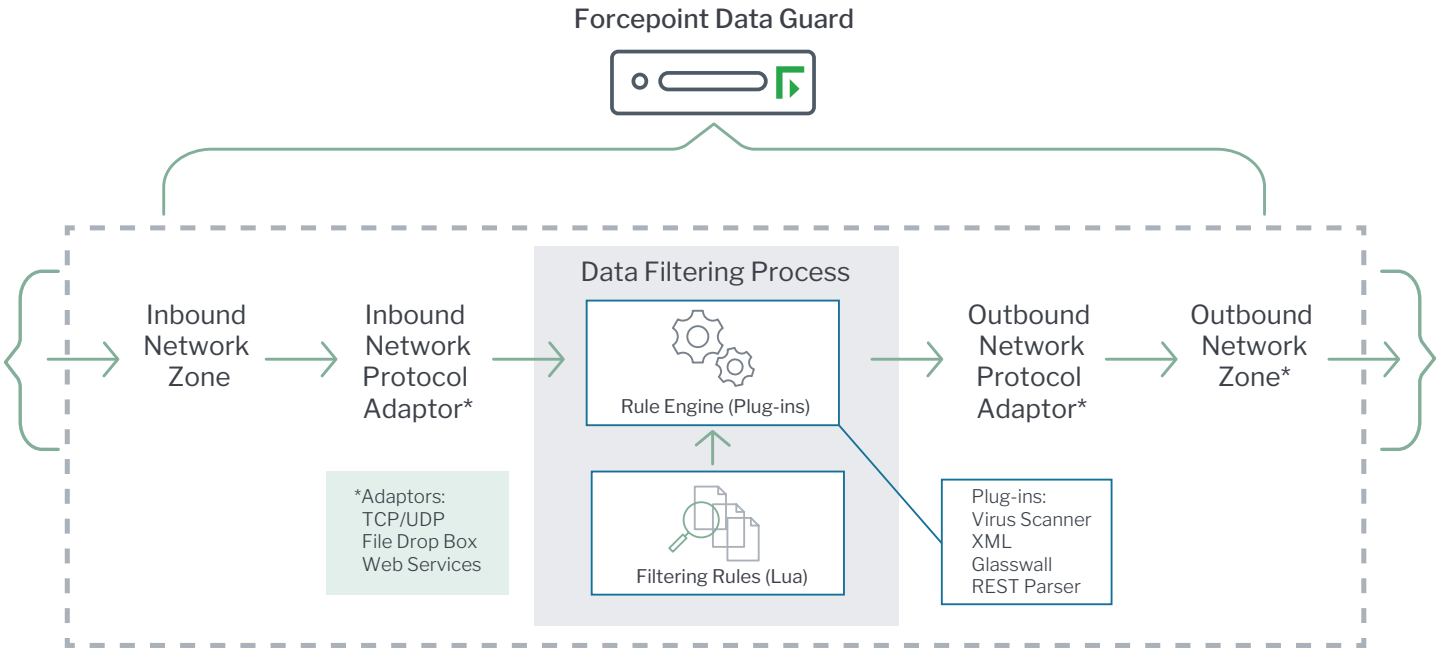
Forcepoint Professional Services works with each customer to determine which adaptor(s) and plugins best support use case requirements. Any combination of adaptors and plugins can be used to secure a flow. Data Guard supports multiple flows, with each flow managed independently without affecting other operational flows.

Adaptors

Data Guard Adaptors are service applications used to receive and transmit data from source and destination networks. When inbound, the adaptors terminate the network protocol. When outbound, they receive filtered data and send it out on to the appropriate network.

- **Generic TCP and UDP**
  Data Guard supports the transfer of most TCP and UDP based protocols. These adaptors are also used to create custom protocols to meet specific data requirements. The UDP adaptor can be used with multicast applications to securely bridge multicast domains or to convert multicast to unicast or vice versa.

- **Secure File Drop**
  The File Drop adaptor monitors directories on source servers and retrieves files for inspection and content filtering prior to dissemination to destination servers. Files that fail transfer due to policy violation can be quarantined on the source system for further analysis and review. The File Drop adaptor uses Secure Copy (SCP) to transfer files between the guard and external servers. *The File Drop adaptor requires an optional feature license.*



- **Web Services**
  The Web Services adaptor is a high-performance proxy for HTTP and HTTPS transfer protocols combined with the flexible rule engine enables modern infrastructures (particularly IT/OT) with secure transport communications and added capabilities for deep content inspection, sanitization and domain separation. *The Web Services adaptor requires an optional feature license.*

Plugins

Data Guard plugins are helper modules that assist with the data filtering process. Plugins simplify the filtering rules (in the LUA language) needed to perform data validation and transformation. *All plugins require an optional feature license.*

- **Virus Scanner**: Integrated McAfee® Anti-Malware Engine for scanning block data or files, a top rated product for effectively detecting malware in real time
- **XML**: Parse, validate (schema and digital signature), and modify standards-compliant XML data types
- **Glasswall**: Sanitization and transformation of complex unstructured documents (e.g., Microsoft Office, PDF) to eliminate malicious threats in real time
- **REST Parser**: Parse and modify REST (JSON or SOAP) data. Allows for workflow creation to inspect and secure REST-based network communications. Widely used with modern microservices and web services
- **Video Streaming**: KLV checking, decoding and encoding of various video transport protocols (e.g., MPEG-TS, RTSP/RTP, HLS) and video frames (H.264, H.265) for security inspections
- **Utility Plugins**: Regex search, PKI and cryptography, file typing, file compression/decompression, HTML and MIME handling, JAR file validation, and more

Logging and auditing

Forcepoint Data Guard is deployed with a standard audit configuration that can be tailored for each deployment. This capability permits the security policy to send any data deemed appropriate to the audit trail at any time. Data Guard supports local log consolidation of the standard operating system syslog, binary auditing, and data transfer logging. System and guard log files can be accessed through the Log Viewer.

System integrity

Data Guard uses various mechanisms for file system integrity checking and local configuration monitoring, including firewalls, auditing policies, system resource monitoring, and file system integrity monitoring.

Integrity validation can occur at any interval as specified by customer policy, typically two to three times a day. Integrity failures can result in a full server halt or service termination (i.e., transfer mechanisms are stopped), depending on customer policy.

Configuration management

Data Guard utilizes a role-based command line management tool for local or remote configuration. The configuration management system preserves a controlled baseline of all Data Guard configurations. Configuration backups can be used to for system restoration and service recovery.

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Internal Reference #FPFB-2019-0320-1 [DATA-GUARD-DATASHEET-US-EN]

100072.032719 Classification and jurisdiction “EAR controlled under ECCN EAR99.”