

The Data Diode Engine is a standalone proxy software for data diodes. Combine with Advenica software services for addressing domain specific use cases such as secure file transfer, log export and more. The modular design enables flexible and scalable data diode solutions for a range of applications.



Main benefits

- Software-only proxy solution, deploy on compatible commercial hardware
- Ready to use with an extensive library of software services for multiple use cases
- Modular architecture for versatile system solutions
- Seamless integration with all Advenica data diode products

Proxy software for data diodes

The Data Diode Engine is a lightweight proxy software designed to work seamlessly with data diodes to enable secure, one-way data flows between network domains.

Ideal for use cases such as secure file import and protected export of production data, it forms the foundation of trusted unidirectional network solutions where confidentiality, integrity, and isolation are critical.

Modular by design

Delivered as a standalone software package, the Data Diode Engine is fully installable on generic, off-the-shelf hardware, allowing flexibility in choosing the infrastructure best suited for specific environment and compliance needs.

Designed for growth

The Data Diode Engine features a modular architecture that scales effortlessly as environment or data volume expands.

Whether starting with a single use case or building out a full network segmentation solution, the software can be adapted to growing demands — supporting additional data flows, integrations, and deployment scenarios.

From standalone to appliance

The Data Diode Engine is compatible with the full set of data diodes from Advenica, from hardware-only to appliance models with integrated proxies.

Technical specification

Recommended setup*	Data Diode Engine 1G
CPU	Intel Haswell based (Xeon v3, Core 4xxx) or newer AMD Zen based (Epyc, Ryzen 1xxx) or newer
Memory	4GB
Networking	1Gbps
Physical interfaces	DATA IN, DATA OUT, ADMIN IN and ADMIN OUT (4)

Software specifications	Data Diode Engine 1G
Firmware	Debian-based
OS Hardening	CIS level 2
Security	Developed according to Advenica Secure Development model. For more information please contact customer support.
Administration	Web interface (HTTPS) using standard browser for configuration and management
Data Diode Services	UDP and TCP services included. Additional services available separately. For more information visit: www.advenica.com

Compatible products	Data Diode Engine 1G
Hardware-only data diodes	Advenica Data Diode DD1G Advenica Data Diode DD1000A Advenica Data Diode DDSFX-10G**
Data diode with integrated proxies	Advenica Data Diode DD1000i

***The recommended setup can differ based on application type and performance criteria.
Please contact customer support for further guidance.**

****Data Diode Engine 1G has a maximum throughput of 1Gbps**



Advenica provides cybersecurity solutions within encryption and network segmentation with the highest level of EU-and national approvals. We were founded in 1993 and are based in Malmö, Sweden, where most of our products are designed, developed, and manufactured. Advenica specialises in the sectors of defence, authorities, infrastructure, and industry. With decades of experience working with Sweden's national security, Advenica is known for delivering cybersecurity with exceptional service.

Read more at advenica.com

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