



SecuriCDS® DD1000i

High assurance data diode with integrated proxy services

SecuriCDS DD1000i is a data diode with hardware based optical separation to assure unidirectional data flow. DD1000i includes proxy services to handle application level protocols and provides an easy integration into any system. It is designed, tested and produced to meet the highest security requirements.

Benefits with integrated proxy service

The SecuriCDS DD1000i takes data protection to a higher level, offering a powerful solution for efficient, risk-free and assured single direction data transfer between open and closed networks.

The SecuriCDS DD1000i can handle common communication protocols e.g. FTP/SFTP for file transfers or NTP for network time transfers. Proxy services translate the protocols into unidirectional dataflows. Normally, the use of a data diode requires the interfacing systems to handle the proxy functionality, with SecuriCDS DD1000i there is no need for such external proxy functions. This reduces both system complexity and total cost of ownership.

Advenica's SecuriCDS DD1000i provides confidentiality for classified networks and systems, and integrity for Industrial Control Systems. Typical use cases include:

- Media streaming or CCTV monitoring.
- Sensor output from ICS/SCADA networks to IT networks.
- File export or import e.g. data storage replication or software updates
- Secure log collection to administrative or audit network
- Sensor input from lower classified network to higher classified network

Integrated package

The SecuriCDS DD1000i offers 1 Gbps performance in an integrated package that includes hardware and software for proxy services. DD1000i can be installed in a 19" rack system utilising 1U.



High assurance

The SecuriCDS DD1000i meets the highest demands on both security and assurance. The integrated proxies are fully separated from the optical diode hardware. Special attention has been given to eliminate the risk of covert channels in the reverse direction, resulting in functions like; one PSU for each side of the data diode and RFI/EMI-reducing internal enclosures to minimize compromising emissions.

Approvals

SecuriCDS DD1000i is approved in Sweden for data transfer between networks of different security levels up to and including the level of HEMLIQ/TOP SECRET.

NCSC-FI in Finland determines that the SecuriCDS DD1000i can be used for data transfer between networks of different security levels up to and including the level of SALAINEN/SECRET.

Advantages

- Optical high assurance separation
- Built-in proxy servers minimises integration effort
- Software Development Kit available
- Enables digitalisation without compromising security
- Fulfilment of internal and regulatory requirements
- National approvals

Technical brief

- Generic Proxy Services
FTP, SFTP, UDP, NTP and Syslog
- Custom proxy services supported
- Separate power inlets for Upstream and Downstream interfaces
- Network data ports
Gigabit Ethernet 8P8C (RJ45)
- Administration (Upstream, Downstream)
Gigabit Ethernet 8P8C (RJ45),
VGA, USB 2.0
- Internal data diode capacity: 1 Gbps
(including error correction data)
- Built-in error correction, configurable
- Built-in heartbeat, Upstream to Downstream, absent heartbeat will be logged
- Tamper evident casing with removable storage media (Tamper seal not effected)
- Padlock support for covering administrative interfaces and removable storage media
- Hardware only option available

Administration

The initial configuration of the DD1000i is created in a stand-alone application. A configuration package is subsequently uploaded to the ADMIN port. Configuration parameters can be made available for a local administrator to change. For active device monitoring, web interface, Syslog and SNMP is supported.

Tailored proxies

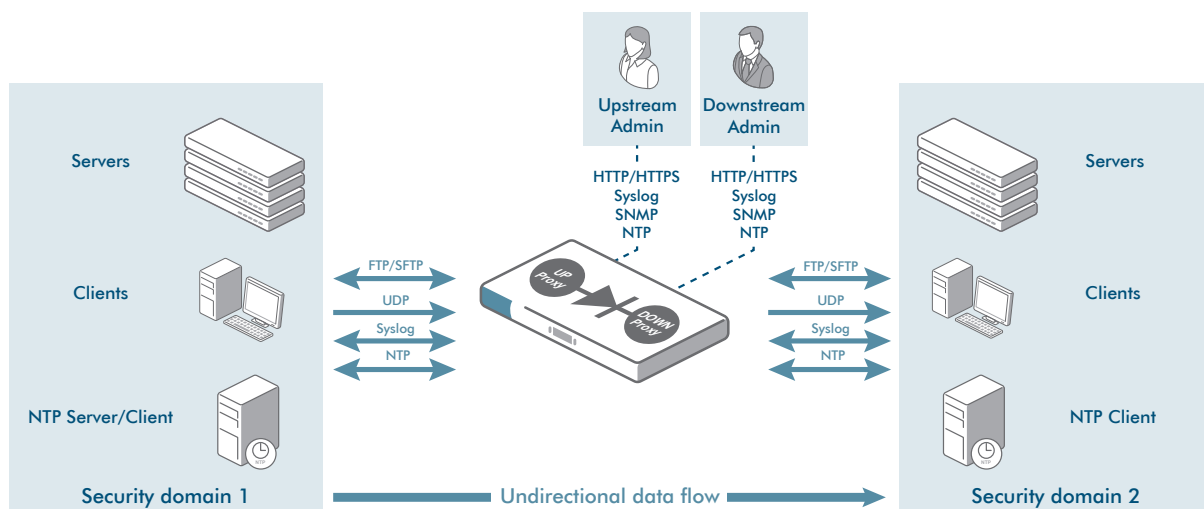
As a trusted proxy provider, we can design and adapt our proxy services to fit your applications, giving you the power to handle the specific information that flows between your systems. We innovate continuously together with our customers and partners. Contact us to find out how we can build a turn-key solution for you.

Software Development Kit (SDK)

Advenica supports third party development by having an SDK available for proxy service development. Even if Advenica is a trusted supplier, you may select internal resources or other consultants for proxy development. Advenica's SDK allows for you to focus on the custom functionality, while still benefit from the security platform that SecuriCDS DD1000i provides.



The SecuriCDS DD1000i dashboard provides real-time and historical information of the information flow.



Network overview SecuriCDS DD1000i.