

vs-diode

Release Notes

Version 2.0

Summary

Information on vs-diode 2.0 is available in these release notes. Please read this document carefully! You are advised to install this upgrade, as this release both resolves problems and provides new features.

The vs-diode is a highly secure security appliance that by design allows communication only in one direction but still enables feedback whether the data reached its destination on the other side.

The release notes should give you an understanding of the new version and make the upgrade easier. Please also note the separate genugate Release Notes and patch readmes for further information concerning the Application Level Gateways (ALGs).

Please do not hesitate to provide us with feedback if you are still missing information in this regard. We will gladly take this into account in the future. You can find our contact information at the end of this document. We wish you much success with the new release vs-diode 2.0.

Kirchheim near Munich, October 7, 2021

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1 Scope of Delivery & General Release Information

The vs-diode middle component software is **not** available for download on the genua web-server. Instead, it will be sent to you. In this regard, please contact your personal contact at genua or the genua customer service.

1.1 Information on the Web

Following information is available on the genua customer portal <http://kunde.genua.de/en>:

The vs-diode Manual

provides an introduction to the vs-diode structure and functionality and covers how to install and configure the ALGs. It is available for download on the customer portal:

[Products](#) → [vs-diode](#) → [Manuals](#)

Release Notes

These Release Notes are also available online in the customer portal:

[Products](#) → [vs-diode](#) → [Release-Notes](#)

Web help

Additional howtos, tips, and information are available at <https://kunde.genua.de/en> in the section [Products](#) → [vs-diode](#) → [Knowledge Base](#). This Knowledge Base is continuously updated with further instructions and supplies the latest informations.

Please note that you have to be logged in into the customer portal to access these contents.

2 New Features & Improvements

2.1 Throughput Increase

The data throughput of the vs-diode is increased to up to 3 GBit/s TCP multistream by using jumbo frames between the ALGs and the middle part.

The new vs-diode version 2.0 uses an MTU of 9000 for this purpose. This MTU must also be configured at the middle component facing network interfaces of the ALGs to benefit from the increased frame size. The MTU can be set in the ALG GUI at [System](#) → [ALG-Interfaces](#) → [<name of the internal interface>](#) → [Physical Interface](#) → [MTU](#). The MTUs of the remaining network interfaces of the ALGs not facing the middle component can still be set to values that meet your needs.

Further information and hints concerning the correct configuration of the ALGs can be found in the vs-diode Manual.

2.2 FTPS

The FTP relay of genugate 10.2 can now mediate between FTP and FTPS. FTP or FTPS can be used independently on the black and red side of the vs-diode. Therefore, for example an FTPS client can transfer data TLS encrypted to the black ALG while the data on the red side of the vs-diode is transmitted unencrypted from the red ALG to an FTP server.

Please note that this feature is only available using at least genugate Version 10.2 for both ALGs.

2.3 New Approval for Classification Level up to GEHEIM

Like previous versions 1.4 and 1.4p1, vs-diode 2.0 is also approved by the german *Federal Office for Information Security* (BSI) for the processing of classified data up to classification level *GEHEIM*.

With the new approval, the black network is no longer required to be classified as VS-NfD.

Further information on approval can be found in the *Security Operating Procedures and Operational COMSEC Doctrine* and other documents of the BSI.

2.4 Approval for Classification Levels SECRET UE/EU SECRET and NATO SECRET

In addition to the national approval for classification level *GEHEIM*, vs-diode 2.0 is now also approved for *SECRET UE/EU SECRET* and *NATO SECRET*.

3 Hardware Compatibility & Software Support Period

3.1 Hardware Compatibility

vs-diode 2.0 supports the following hardware platforms. Please see our customer portal under [Products](#) → [vs-diode](#) → [Hardware Info](#) for detailed information on available and supported hardware. Please contact our support team if you plan to use different hardware features than the ones supplied.

The hardware revision 3.0 with 10 GBit/s network interfaces is supported since vs-diode 1.4p1.

Please note that a mixed operation of different hardware revisions of the middle part and the ALGs is not supported.

	vs-diode M One-Way	vs-diode M ALG
Revision	2.0	2.0
	3.0	3.0

If you still have older hardware, please contact the genua sales department to discuss possibilities for a hardware upgrade.

Before delivery, the middle component hardware and the red ALG hardware are subjected to a emission test and provided with tamper test seals. Further information on this can be found in the *Security Operating Procedures and Operational COMSEC Doctrine*.

3.2 Software Support Period

vs-diode One-Way Middle Component

vs-diode 1.4p1 will be supported until the end of its approval on 2022-03-31.

vs-diode 2.0 will probably be supported until about six months after the release of vs-diode 2.1.

vs-diode Application Level Gateways

An overview over the currently supported genugate versions for the ALGs can be found in the customer portal at [Produkte](#) → [genugate](#).

Please note, that FTPS (FTP with TLS) is only available in versions 10.2 and above.

4 Upgrade Instructions & Requirements

4.1 Prerequisites

Before installing, please make sure that your hardware is supported by this software. Information on this can be found in chapter 3.1.

4.2 Where to Download the vs-diode Software

Middle Component

The vs-diode middle component software is **not** available for download on the genua web-server. Instead, it will be sent to you. In this regard, please contact your personal contact at genua or the genua customer service.

Application Level Gateways

The ALG software is available for download in the *genugate* section of our customer portal: [Products](#) → [genugate](#) → [Patches](#)

Please note that you have to be logged in into the customer portal and must have a valid *genugate* license to access these contents.

An overview over the currently supported *genugate* versions for the ALGs can be found in the customer portal at [Produkte](#) → [genugate](#).

We recommend to use the newest version if you require new features such as new transmission protocols.

On the other hand, we recommend to use a certified *genugate* version if you are not dependent on new features and prefer a long support period with its lower maintenance effort due to fewer necessary upgrades. These versions are marked with a Z like the latest certified version *genugate 10.0 Z*.

Please note, that FTPS (FTP with TLS) is only available in versions 10.2 and above.

4.3 vs-diode Update

Middle Component

Since the middle component of the vs-diode starts from DVD-ROM and does not require configuration, all you have to do is to insert the new DVD-ROM and restart the middle component. Further information on this and on the installation and configuration of the ALGs can be found in the vs-diode Manual.

Application Level Gateways

If you want to benefit from the higher throughput of vs-diode 2.0, you must configure jumbo frames in the ALGs as described in chapter 2.1.

5 How to Contact Us

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