

SHA-2 Support

Version 5.2



SHA-2 Support

Version 5.2

Note Before using this information and the product it supports, read the information in "Notices" on page 3.						

© Copyright IBM Corporation 2009, 2014. US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

SHA-2 support for Sterling	Notices
Connect:Direct	

SHA-2 support for Sterling Connect:Direct

If you want to use SHA-2 certificates with IBM® Sterling Connect:Direct® Secure Plus, you must consider which nodes support SHA-2 certificates. If you use IBM Sterling Secure Proxy to secure a session that uses SHA-2 certificates, be sure to use a version of that software that supports SHA-2 certificates.

Sterling Connect:Direct SHA-2 compatibility

If a Sterling Connect:Direct SNODE supports SHA-2 certificates and uses a SHA-2 key certificate and the PNODE does not support SHA-2 certificates, the session fails. If the Sterling Connect:Direct PNODE supports SHA-2 certificates and uses a SHA-2 key certificate and the SNODE does not support SHA-2 certificates, the session fails if client authentication is enabled.

SHA-2 compatibility works the same way with Sterling Secure Proxy as it does with Sterling Connect:Direct. However, Sterling Secure Proxy acts as a client instead of a PNODE and acts as a server instead of an SNODE.

Table 1. SHA-2 certificate configuration scenarios

PNODE (Client)	SNODE (Server)	Client authentication enabled?	Session outcome
Supports SHA-2 certificates	Supports SHA-2 certificates	Yes	Succeeds
Configured to use SHA-2 certificate	Configured to use SHA-2 certificate		
Supports SHA-2 certificates	Supports SHA-2 certificates	No	Succeeds
Configured to use SHA-2 certificate	Configured to use SHA-2 certificate		
Supports SHA-2 certificates	Does not support SHA-2 certificates	Yes	Fails
Configured to use SHA-2 certificates			
Supports SHA-2 certificates	Does not support SHA-2 certificates	No	Succeeds
Configured to use SHA-2 certificates			
Does not support SHA-2 certificates	Supports SHA-2 certificates	Yes	Fails
	Configured to use SHA-2 certificate		
Does not support SHA-2 certificates	Supports SHA-2 certificates	No	Fails
	Configured to use SHA-2 certificate		

SHA-2 compatible software

The following versions of Sterling Connect:Direct and Sterling Secure Proxy support SHA-2 certificates:

Table 2. SHA-2 Compatible Software

Software	Version
Sterling Connect:Direct for z/OS®	All versions
Sterling Connect:Direct for UNIX	4.1.0 or later, 4.0.00 with 04Mar2011 maintenance or later
Sterling Connect:Direct for Microsoft Windows	4.6.0 or later, 4.5.01 or later, 4.5.00 Patch 035 or later, 4.4.01 or later, 4.4.00 Patch 068 or later
Sterling Secure Proxy	3.4.1 or later
Sterling Connect:Direct for HP NonStop	3.6.0.1 and later
Sterling Connect:Direct for i5/OS [™]	3.7.0 and later

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing

IBM Corporation

North Castle Drive

Armonk, NY 10504-1785

U.S.A.

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing

Legal and Intellectual Property Law

IBM Japan Ltd.

19-21, Nihonbashi-Hakozakicho, Chuo-ku

Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be

incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation

J46A/G4

555 Bailey Avenue

San Jose, CA 95141-1003

U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

All IBM prices shown are IBM's suggested retail prices, are current and are subject to change without notice. Dealer prices may vary.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© IBM 2014. Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. 2014.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

IBM, the IBM logo, and ibm.com® are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at http://www.ibm.com/legal/copytrade.shtml.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency which is now part of the Office of Government Commerce.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

ITIL is a registered trademark, and a registered community trademark of the Office of Government Commerce, and is registered in the U.S. Patent and Trademark Office.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java[™] and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license therefrom.

Linear Tape-Open, LTO, the LTO Logo, Ultrium and the Ultrium Logo are trademarks of HP, IBM Corp. and Quantum in the U.S. and other countries.

Connect Control Center®, Connect:Direct®, Connect:Enterprise®, Gentran®, Gentran®:Basic®, Gentran:Control®, Gentran:Director®, Gentran:Plus®, Gentran:Realtime®, Gentran:Server®, Gentran:Viewpoint®, Sterling Commerce™, Sterling Information Broker®, and Sterling Integrator® are trademarks or registered trademarks of Sterling Commerce®, Inc., an IBM Company.

Other company, product, and service names may be trademarks or service marks of others.

IBW.

Product Number: 5725-C99

5655-X01

Printed in USA