Release Notes: IBM Aspera HSTS and HSTE 3.9.6.2

Product Release: November 4, 2020
Release Notes Updated: November 9, 2020

This release of IBM Aspera High-Speed Transfer Server HSTS 3.9.6.2 provides the new features, fixes, and other changes listed below. In particular, the Breaking Changes section provides important information about modifications to the product that may require you to adjust your workflow, configuration, or usage. Additional sections cover system requirements and known problems.

IMPORTANT: If you did not upgrade to 3.9.6.1, **you must upgrade to 3.9.6.2.**

IBM Aspera has discovered a security vulnerability that requires your immediate attention. Certain Aspera applications are vulnerable to a buffer overflow, which could allow an attacker with intimate knowledge of the system to execute commands in a restricted shell (aspshell). This vulnerability has been corrected in IBM Aspera HSTS and HSTE releases 3.9.6.1 and 3.9.6.2. The only exception is if you already have 3.9.6 and you applied the security patch as described in the security patch instructions.

New Features

- HSTS includes a new tool, **`askmscli`**, which provides a secure alternative to storing sensitive data as plain text in `aspera.conf`. Use **`askmscli`** to store the data, encrypted, in local keystores protected by file system permissions. (ATT-1328)

  For more about **`askmscli`** advantages, capabilities, and usage, see Security Enhancements for HSTS 3.9.6.2
- All daemon processes on Unix platforms (`asperanoded`, `asperacentral`, `asperaredisd`, `asperahttpd`, `asperarund`) now run as a new user, `asperadaemon`. The `asperadeamon` user makes use of sudoers functionality to launch processes as other transfer users. This change improves the overall security of HSTS and HSTE. (NODE-1065)
- A new field, "dynamic_key", has been added to `aspera.conf`. Set this value to true to enable randomly generated encryption_key values to be used to generate transfer tokens for files/upload_setup and files/download_setup API requests to the Node API. Using this field improves the security of the HSTS and HSTE and is recommended for all installations. (ATT-1253)
- The Node API now uses a child process to perform file-system operations when those operations are done on non-object storage-based file systems. This change improves the security of HSTS and HSTE installations. (ATT-1340)

Breaking Changes

- ES-1764 - To edit the license file from the HSTS GUI, make sure the user running the GUI is a member of the `aspadmins` group.
- ES-1696 - The **`alee-admin`** tool can now be run only as the root user (or with the `sudo` command).

Entitlement Customers: Please note that you must configure your firewall appropriately. As of 3.9.3, Aspera upgraded its metering and billing service, and the transfer server provides the facility required to communicate with this new service. If your firewall is not configured properly, entitlement transfer servers will no longer work and loss of transfer functionality is likely. Please contact your sales representative if you have any questions or concerns.

The required firewall configuration:

- Allow outbound traffic on TCP port 443.
- Allowlist the following ranges of IP addresses:

169.48.106.192/26	169.46.4.68/31
169.61.54.112/29	169.46.4.70/31
169.60.151.232/31	169.48.249.64/26
169.60.129.66/31	169.48.226.120/31
169.60.197.0/26	169.48.236.50/31
169.61.233.80/29	

Issues Fixed in this Release

ES-1731 - Updated jackson-databind, jsch, and httpclient java dependencies to the latest versions.

ATT-1296 - In **ascp**, when using a sub-access key, files could end up in the wrong destination folder if an incorrect value was specified with the **--tags** option. (TS004338336)

NODE-1082 - Incorrect header passed in an HTTP/HTTPS request to `asperanoded` resulted in the request never finishing. `asperanoded` times out requests in 20 seconds if no data is received. The timeout value is configurable in the `aspera.conf` server section under the `read_timeout_seconds` key.

NODE-1058 - In `asperanoded`, certain HTTPS traffic patterns were not properly handled, with the result that `asperanoded` did not process new incoming requests. (CIM-3294)

System Requirements

Platform	Version
Linux 64-bit	Ubuntu 14.04 LTS, 16.04 LTS, 17.10. RHEL 6-8. CentOS 6-8. SLES 11-12. Debian 7-9. Fedora 26-27. Kernel 2.4 or higher and Glibc 2.5+
Windows 64-bit	Windows Server 2012, 2016, and 2019.
Mac OS	OS X 10.11 (El Capitan), macOS 10.12 (Sierra), macOS 10.13 (High Sierra), macOS 10.14 (Mojave), macOS 10.15 (Catalina).
PowerLinux	Ubuntu 16.04.2 LTS. Your OS version must support little-endian (LE) ordering, and it must run on IBM Power hardware that supports LE ordering. Kernel: Linux 4.4.0-116-generic. Architecture: ppc64-le.
AIX	7.1, 7.2.
zLinux	Linux on z Systems s390, 64-bit. Red Hat Enterprise Linux Server (RHEL) 6-7.3. SUSE Linux Enterprise Server (SLES) 11-12
Solaris x86	10, 11.
Solaris SPARC	9, 10.
Isilon 8	Isilon OneFS 8.0, 8.1, 8.1.2.

Downloads and Documentation

For software downloads and documentation, go to https://www.ibm.com/aspera/downloads/.

Known Issues

ATT-1390 - When using the Aspera HTTPD fallback feature on your HSTS and you have file_manifest configured, make sure the manifest directory is writable by the `asperadaemon` user. With the change to

have all daemons running as `asperadaemon`, the configured file_manifest directory might not have the correct ownership or permissions.

NODE-1024 - For the Isilon platform, the `asperanoded` service must be restarted manually following an upgrade.

N/A - For the zLinux platform, you must disable the translation file `/opt/aspera/etc/asconfigurator_trans.xml` in order to use the **`asconfigurator`** tool to configure the transfer server. Move or rename `asconfigurator_trans.xml`.

Deprecated Features

The HSTS web UI is deprecated, and will be removed from the product in a future release.

Product Support

For IBM Aspera Support information, see the IBM Support Guide.

To open a support case, log in with your IBMid or set up a new IBMid account. See Community Registration.

To stay informed of critical IBM software support updates, subscribe to Aspera products with My Notifications.