



## XstreamCORE ET 8200 Firmware Release v3.00

### 1. General Release Information

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These product release notes define the features, known issues and release details that apply to the XstreamCORE ET 8200 version 3.00 that was released on 5/3/2019

### 2. Introduction

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- **Version 3.00 (Released 5/3/2019)**
  - **Release details**
    - To enhance network security support
    - To provide general product updates and improvements
  - **New and updated features**
    - Added support for Redfish/Swordfish.
    - Added support for Secure Shell (SSH) network protocol.
      - This replaces the Telnet feature.
    - Added support for SSH File Transfer Protocol (SFTP).
      - This replaces the FTP feature.
    - Added support for SNMPv3.
      - This replaces the earlier implementation of SNMP
    - Added DNS server configuration to the XstreamVIEW's remote management page.
    - Added CLI support to configure the SNMPv3 username and password (SNMPUsername).
    - Added CLI support for displaying the SNMPv3 Engine ID (SNMPDumpEngineID).
    - Added CLI support for displaying Ethernet port status (EthPortList).
    - Added CLI and XstreamVIEW restrictions on all system usernames and passwords.
    - Added event log messages for SSH, SFTP, and HTTPS logins.
    - Added event log messages when usernames and/or passwords are changed.
    - Added more event log messages for device error conditions.
    - Improved CLI DisplayInitiators command to show connections by data port.
    - A system reboot is no longer needed for changes to Ethernet port setting CLI commands
    - Improved XstreamVIEW GUI controller page functionality.
    - Improved LUN numbering for devices associated with RAID arrays.
    - Improved reservation handling in tape environments.
    - Improved CLI and XstreamVIEW device display info to show the full device serial number.
    - Improved initiator access control handling on the XstreamVIEW GUI Manual Target Management page.
- **Version 2.00 (Released 3/29/2019)**
  - **Release details**
    - Added support for hardware accelerated iSCSI for SAS SSD and HDD devices
    - Improved iSCSI performance
    - General product improvements

- **New and updated features**
  - *Added support for accelerated iSCSI connections to disk*
  - *Improved event log functionality on shutdown and when time/date is manually adjusted.*
  - *Improved mapping of discovered disk devices to default target node and enclosure target nodes.*
  - *Removed support for “Bottleneck Bandwidth and Round-trip propagation time” (BBR) congestion control algorithm.*
  - *Added support for TCP Fast Retransmit.*
  - *Added support for TCP Selective Acknowledgement (SACK).*
  - *Improved XstreamVIEW GUI controller page functionality.*
  - *Improved minimum/maximum operating temperature defaults.*
  - *Improved handling when the controller LUN is removed.*
  - *Improved iSER handling when drives return sense data error responses.*
- **Version 1.20 (Released 2/8/2019)**
  - **Release details**
    - *Added support for hardware accelerated iSCSI for SAS tape devices*
    - *Added support for XCET-8200-TA2 TAPE ONLY SKU*
    - *General product improvements*
  - **New and updated features**
    - *iSCSI connections are now accelerated, providing improved iSCSI tape performance.*
    - *Added support for “Bottleneck Bandwidth and Round-trip propagation time” (BBR) congestion control algorithm.*
    - *Added RoCE v2 support.*
    - *Improved XstreamVIEW GUI mapping page functionality.*
    - *Improved XstreamVIEW GUI access control and CHAP configuration functionality.*
    - *Improved XstreamVIEW GUI manual target management page functionality.*
    - *Improved XstreamVIEW GUI username and password handling.*
    - *Improved XstreamVIEW GUI firmware update page handling.*
    - *XstreamVIEW GUI will now logout a user after 30 minutes of inactivity.*
    - *XstreamVIEW GUI status page now displays individual PHY status.*
    - *The XC8200 is now discoverable via the ATTO QuickNAV utility.*
    - *Improved PING functionality.*
    - *Added in-band CLI functionality.*
    - *Improved core dump functionality (system logs are now saved upon core dump).*
    - *Applied event log reduction and improvements from the XC7000 series.*
    - *Improved event log persistence, ordering and time stamping.*
    - *Improved SASEnclosures display to be consistent with RouteDisplay mapping output.*
    - *Restricted ability to rename an iSCSI target node when initiators are actively logged-in to it.*
    - *Added support for Veritas ISV package.*
    - *Added new feature: CLI logging.*
    - *Improved help text display for all CLI commands.*
- **Version 1.00 (Released 11/13/2017)**
  - **XstreamCORE ET 8200 Specifics**
    - *8200 Storage Controllers bridge (2) 40Gb Ethernet ports to (4) 12Gb SAS connectors (16 PHYs)*
    - *Support for up to 240 SSDs or HDDs*
      - *Support for up to 960 SSD or HDD disk drives for OEM customers*
    - *Data path fully protected - eliminates silent data corruption*
    - *Adds less than 2 microseconds of latency to attached storage (when using iSER)*
    - *Dual hot-swap power supplies*
    - *Flash ROM supports dual boot images for greater reliability & on-line firmware updates*
    - *Large flash event log stored in NAND memory for more efficient field diagnostics*
    - *Ethernet QSFP+ modules included with product*
    - *Dual 100/1000 Ethernet management ports with support for IPv4*

- *Single USB management port*
- *Single serial management port*
- **Initial Release Features**
  - *Supports connection to 10Gb and 40Gb Ethernet with iSER protocol support*
  - *Supports SAS 3Gb, 6Gb and 12Gb disk storage devices*
  - *Supports SATA 3Gb and 6Gb disk storage devices*
  - *xCORE™ provides low latency data movement using parallel I/O acceleration engines*
  - *eCORE™ Control Engine provides common storage and management services*
  - *Drive Map Director™ feature provides predictive enclosure-aware mapping scheme*
  - *XstreamVIEW™ System Manager GUI, CLI, FTP and Telnet access*
  - *Available port statistics*
  - *HTTPS support on the management ports*
  - *IPv4 support on data and management ports*
  - *SNMP support*
  - *SMTP support*
- **Operating Requirements**
  - *This release support iSCSI Extensions for RDMA over Ethernet (iSER)*
  - *To access iSER performance you must have an Ethernet NIC capable of RDMA (RoCE and iSER), if using Ethernet switches they must support flow control or PFC (Priority Flow Control) and operating systems that support iSER which include:*
    - *SuSE Linux*
    - *Red Hat Enterprise Linux (RHEL)*
    - *CentOS Linux*

### 3. Known Issues/Advisements

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- When upgrading firmware on the XC8200 from any release before v1.20, please use FTP rather than the XstreamVIEW GUI. The firmware update will fail if done through the GUI.
- Upgrade to v2.00 firmware prior to installing v3.00 firmware.
- After installing v3.00 firmware, the XC's read-write (RW) and read-only (RO) usernames and passwords will be reset to the following:
  - Username: admin
  - Password: P@SSw0rd
- It is recommended that the RW and RO usernames and passwords then be changed to user preferences (via the XstreamVIEW GUI Controller page or via the CLI Username and Password commands).
  - v3.00 Username restrictions:
    - 1 to 32 characters long
    - All lowercase
    - Must start with an alphabetical letter (a-z)
    - May only contain alphanumeric, dashes, underscores or periods
  - v3.00 Password restrictions:
    - 8 to 32 characters long
    - Must contain at least one numeric character (0-9)
    - Cannot contain spaces, tabs, apostrophes, backslashes or semicolons
- After modifying usernames and passwords to user preferences, submit the new configuration and reboot the controller.
- If SNMP is desired, navigate to the XstreamVIEW GUI Remote Management page, enable SNMP (and optionally traps/extended traps), create a SNMPv3 username and password pair, submit the configuration, and reboot.
  - SNMP Username restrictions:
    - 1 to 32 characters long
    - No symbols present
  - SNMP Password restrictions:
    - 8 to 32 characters long
    - No symbols present

- The XC8200ET now supports SSH. Telnet is no longer supported. An SSH client (e.g. OpenSSH on Linux, Teraterm on Windows) is required to make an SSH connection.
- The XC8200ET now supports SFTP. FTP is no longer supported. An SFTP client (e.g. OpenSSH SFTP client on Linux, Filezilla on Windows) is required to make an SFTP connection.
- SFTP connections use non-standard port 20 (instead of port 22).
- For SFTP connections via Filezilla, configure it to use one connection at a time (the XC does not support multiple SFTP connections). This is set in the “Settings->Transfers->Maximum Simultaneous transfers” textbox. The WinSCP client also has this issue.
- Note that when upgrading firmware through SFTP, user status feedback is not available. Consult the controller event log (DumpEventLog) to verify success of an upload prior to rebooting the controller.
- SNMPv3 clients require the SNMP server’s EngineID, a unique identifier held by an SNMP server. To help simplify the client setup, the EngineID is provided on the XstreamVIEW GUI Remote Management page (or via the CLI command SNMPEngineID).
- Please contact ATTO Technical Support for the latest issues and advisements.

#### 4. Affected Products

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Product Name	SKU
XstreamCORE ET 8200	XCET-8200-002
XstreamCORE ET 8200T (Tape only SKU)	XCET-8200-TA2

#### 5. Contacting ATTO Support

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ATTO Technology, Inc. is renowned for its technical support services. ATTO’s goal is to provide you the quickest response possible for your technical support needs, and is available Monday-Friday, 8:00 AM to 8:00 PM EST (except holidays and plant closings).

ATTO Technical Support can be contacted via phone or email:

- Phone: 716.691.1999 ext. 242
- E-Mail: [techsupport@attotech.com](mailto:techsupport@attotech.com)