



## BrickStor Release Notes

Version 22.1.1



## Terms of Use Applicable to the User Documentation

The legal notices, disclaimers, terms of use, and other information contained herein (the "terms") apply only to the information discussed in this documentation (the "Documentation") and your use of it. These terms do not apply to or govern the use of websites controlled by RackTop Systems, Inc. or its subsidiaries (collectively, "RackTop Systems") or any RackTop Systems-provided products. RackTop Systems products are available for purchase and subject to a separate license agreement and/or terms of use containing very different terms and conditions.

## Terms of Use and Copyright and Trademark Notices

The copyright in the Documentation is owned by RackTop Systems and is protected by copyright and other intellectual property laws of the United States and other countries. You may use, print out, save on a retrieval system, and otherwise copy and distribute the Documentation solely for non-commercial use, provided that you (i) do not modify the Documentation in any way and (ii) always include RackTop Systems' copyright, trademark, and other proprietary notices, as well as a link to, or print out of, the full contents of this page and its terms.

No part of the Documentation may be used in a compilation or otherwise incorporated into another work or with or into any other documentation or user manuals, or be used to create derivative works, without the express prior written permission of RackTop Systems. RackTop Systems reserves the right to change the terms at any time, and your continued use of the Documentation shall be deemed an acceptance of those terms.

RackTop Systems, the RackTop Systems logo, BrickStor, CyberConverged, and certain other trademarks and logos are trademarks or registered trademarks of RackTop Systems, Inc. in the United States and other countries. Other company, product and service names may be trademarks or service marks of others.

© 2019 RackTop Systems, Inc. All rights reserved.

## Disclaimers

The Documentation and any information available from it may include inaccuracies or typographical errors. RackTop Systems may change the documentation from time to time. RackTop Systems makes no representations or warranties about the accuracy or suitability of any RackTop Systems-controlled website, the Documentation and/or any product information. RackTop Systems-controlled websites, the Documentation and all product information are provided "as is" and RackTop Systems disclaims any and all express and implied warranties, including but not limited to warranties of title and the implied warranties of merchantability and/or fitness for a particular purpose. In no event shall RackTop Systems be liable to you for any direct, indirect, incidental, special, exemplary, punitive, or consequential damages (including but not limited to procurement of substitute goods or services, loss of data, loss of profits, and/or business interruptions), arising out of or in any way related to RackTop Systems-controlled websites or the documentation, no matter how caused and/or whether based on contract, strict liability, negligence or other tortious activity, or any other theory of liability, even if RackTop Systems is advised of the possibility of such damages. because some states/jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you.

# Table of Contents

- Welcome to Version 22.1.1 ..... 3
  - About the Release Notes ..... 3
- Features and Functionality ..... 4
  - 22.1.1 ..... 4
  - 22.1.0 ..... 4
  - 22.0.2 ..... 5
  - 22.0.0 ..... 5
- Upgrade to Version 22.1.1 ..... 8
- Resolved Issues ..... 9
  - 22.1.1 ..... 9
  - 22.1.0 ..... 9
  - 22.0.2 ..... 10
  - 22.0.0 ..... 10
- Known Issues ..... 12
- For Assistance ..... 13
  - Online Resources ..... 13
  - Contact RackTop ..... 13

# Welcome to Version 22.1.1

Thank you for choosing BrickStor. The RackTop team is pleased to announce the availability of BrickStor version 22.1.1.

## About the Release Notes

The release notes provide critical and release-specific information for Version 22.1.1, including upgrade instructions and behavior changes. Read this document even if you are familiar with BrickStor releases and have previous experience upgrading BrickStor installations.

# Features and Functionality

## 22.1.1

Minor patch release addressing CVE-2020-1472 advisory.

## 22.1.0

### New & Notable Features

#### *UEFI boot*

BrickStor SP installation now supports UEFI booting! This only applies to the new installations using 22.1 or newer version. Previously installed systems using Legacy mode will remain in Legacy mode.

#### *New hardware support*

- Intel R2000WFXXX chassis (Big Horn Peak)
- Intel x722 network adapters (i40)
- Atto Host Bust Adapters
- Emulex Fibre Channel adapters (initiator mode)
- HPE 3Par (iSCSI/FC)
- HPE Primera (iSCSI/FC)
- HPE XP8 (FC)
- HPE Nimble (iSCSI/FC)
- HPE Synergy

#### *New console loader and login screens*

We are happy to introduce redesigned loader and login screens. Both are simplified to improve usability and out of the box experience.

For newly installed systems the console login will present an initial configuration wizard. The wizard will assist in setting up network configuration for the management interface and step through the BrickStor SP registration.

#### *New software registration*

22.1 brings in enhanced registration process. The systems can now be licensed via myRackTop portal <https://myracktop.com>.

### Changes to Existing Features

AFP is no longer part of the product. Be sure to migrate any existing AFP shares to SMB prior to upgrading to this version.

RackTop call home for updates switched from <https://api.myracktop.com> to <https://myracktop.com>. If applicable, check any outbound firewall policies to allow TCP port 443 to myracktop.com from the BrickStor SP appliances.

A new database format for Data Protection and Replication logs was introduced in version 22. Existing logs are automatically migrated. If you are missing legacy log entries, contact [RackTop Support](#) for assistance.

Python was removed from this release and is no longer supported.

Some other features received bug fixes: Replication, TDM, HA (pool import/export), Rack View, Mellanox driver. See [Resolved Issues](#) section for details.

## Deprecated Features

No deprecated features in this version.

## 22.0.2

## New & Notable Features

This is a minor patch release. No new features.

## Changes to Existing Features

This is a minor patch release. No changed features.

## Deprecated Features

This is a minor patch release. No deprecated features.

## 22.0.0

## New & Notable Features

### *Transparent Data Movement (TDM)*

Transparent Data Movement (TDM) enables the seamless movement of data between tiers of storage within a BrickStor SP to external storage tiers including other BrickStor SP nodes, third party NFS capable storage and S3 compliant object storage. TDM is an advanced hierarchical storage management feature of the BrickStor SP operating system that enables policy-based security and compliance to be applied to data stored in the cloud or on third party storage systems. Policies can be applied to the dataset to determine which target the data should tier to when policy dictates it should be moved to a more economical tier of storage. Users continue to access data through the same client protocols using the original file path and do not need to change their workflow. All data is compressed and encrypted before leaving the BrickStor, which means that data on untrusted 3rd party systems is safe.

All BrickStor operating systems version 22 and greater come with a 5TB TDM license. Additional capacity can be purchased from your sales team.

### *BrickStor SP Manager*

The management interface previously known as myRack Manager has a new look, and many many functionality improvements, including:

- Improved warnings and feedback
- Numerous connection and connection management improvements
- Key Manager auto backup and status reporting support
- Permissions management improvements
- New HA and Peering management options
- Support for Replication updates
- Support for new TDM feature
- Improvements to User Behavior

### *Replication 2.0*

The data replication engine was completely redesigned and is brand new in this version. New capabilities were introduced to include parallel transfers, an on-demand and efficient queueing mechanism, and a high-speed WAN optimized transport which improves data transfers on high latency links. Improvements include:

- Configurable number of parallel streams per destination.
- Ability to cancel the sending of a snapshot.
- Ability to temporarily raise or lower a dataset's priority.
- Bandwidth limitations per source/destination pair.
- Further refinement of bandwidth during configurable peak hours.
- Proprietary high-speed transfer/Improved WAN Optimization. (licensed feature)
- Ability to skip over a snapshot.

### *BrickStor SP Branding*

BrickStor is now known as “BrickStor Security Platform” or BrickStor SP, and myRack Manager is now known as “BrickStor SP Manager”. New color schemes and usability features have been introduced and improved, including:

- Improved warnings and feedback
- Numerous connection and connection management improvements
- Key Manager auto backup and status reporting support
- Permissions management improvements
- New HA and Peering management options
- Support for Replication updates
- Support for new TDM feature
- Improvements to User Behavior

## **Changes to Existing Features**

This is a minor patch release. No changed features.

## Deprecated Features

### *Apple Filing Protocol*

AFP has been deprecated in this version. RackTop and Apple recommend using SMB instead.



## Upgrade to Version 22.1.1

Please refer to the Upgrading section of the User Guide for detailed upgrade instructions. It is always recommended to notify support of your intention to upgrade so that any special use cases can be addressed and an Engineer can be available to assist.

## Resolved Issues

Issues listed here were verified as resolved when this BrickStor version was initially released.

### 22.1.1

Key	Description
BSR-7359	SMB CVE-2020-1472

### 22.1.0

Key	Description
BSR-6914	Dataprotection temporary TDM snapshots flooding the log
BSR-7005	TDM Unable to mount NFS
BSR-6695	TDM dynamic space reclamation did not clear out data, caused pool to stay in 'disabling' state
BSR-6876	TDM did not verify remote space before transferring
BSR-7038	TDM False report about license capacity
BSR-6888	TDM keep transferring data even when licensed quantity is exceeded
BSR-6865	UB logs flooded with same message every 15 seconds
BSR-6985	hwd does not reflect disk size change
BSR-6893	hwd ipmi sensors lost
BSR-6905	NFS 4.x server can crash in 128K clients high load stress testing
BSR-6981	Update service is wedged after removing old images
BSR-7039	iSCSI should self heal when keymgrd recovers
BSR-7219	Replication WAN optimized license error
BSR-7123	Replication WAN Optimized always showing in logs whether enabled or not
BSR-7124	Replication is reporting that there are snapshots newer than the common snapshot on the receiving side
BSR-7125	SMB advisory locks not working
BSR-7044	HA Resource Group move fails to mount a pool
BSR-6900	System fails to complete import when nested empty directories exist
BSR-7221	System redundant lines being written to hosts file
BSR-5843	System bad disk can cause bus resets
MYR-2196	Permissions - Error resolving current user can cause excessive query traffic
MYR-2176	Add idmap to required system services to support permissions feature

Key	Description
MYR-2165	Rackview SOMETIMES does not report power failure on HPE disk enclosures
MYR-2075	UI does not report failed power supply on HPE D3610 enclosures
MYR-2114	iSCSI - Manual unlock volume does not put it back online
MYR-2178	OS upgrade - Cannot install a cached image if myrack connection is down
MYR-2122	HA - Wizard displays default comm port versus actual
MYR-2158	HA - 'Disable Node' not occurring during Fail-over when selected
MYR-2146	Networking - admin0 interface info is blank for VMware hosted virtual appliances
MYR-2171	Permissions - "These permission will not be applied to sub-datasets" should say "These permissions...."
MYR-2136	HA - Flyout stays open displaying "No longer disabled" after enable
MYR-1245	Pool structure details shows erroneous information
MYR-2117	Missing AFP service error results in no services displayed on system tab

## 22.0.2

Key	Description
BSR-7221	Fixes redundant lines being written to hosts file.
BSR-7155	Replication incorrectly reporting snapshots on receiver that are newer than common snapshot.
BSR-7174	HA resource group fails to mount pool under certain conditions on failover.
BSR-7181	WAN Optimization showing in logs when not enabled.
MYR-2188	SMB Allow nbmand on dataset.

## 22.0.0

Key	Description
BSR-6715	A problem in the Mellanox driver which could cause a system to panic.
BSR-6685	ARC tuning. This fix optimized the Adaptive Replacement Cache which under certain circumstances would affect system performance.
BSR-6658	Incorrect timestamps in metricsd.
BSR-6656	Replication service lower case customer number in log
BSR-6617	Added support for static routes in High Availability configurations
BSR-6526	Fixed issue where child datasets of a parent NFS share were not accessible by older nfs clients

<b>Key</b>	<b>Description</b>
BSR-6448	Peering - SSH peering cannot find ssh keyfile
BSR-6307	Fixed issue where TCP sockets using cubic congestion control would stop transmitting.
BSR-6266	Fixed issue where SSL certificates were flagged as a vulnerability in a Nessus scan in HA configurations.
BSR-6063	Fixed issue where NDMP listen would fails if the ndmpd/mover-nic property was an empty string
BSR-5811	Fixed issue where the influxd service would fail due to memory consumption.
BSR-3207	Fixed issue where the LDAP client would require name service cache to be enabled and affect SMB.
MYR-1897	Fixed issue in UI where a reboot would fail and not record audit.
MYR-1233	This was a bug that in some cases prevented removing disabled replication peers in the UI.

## Known Issues

Issues listed here were known to exist when this BrickStor version was initially released.

### *BSR-7256 Registration UI needs customer ID field validation*

**Solution:** RackTop customer number is eight characters long starting with "CN". When entering customer number be sure it matches the one on the myRackTop portal. Any alphabetic characters must be capitalized. Copying and pasting text can sometimes introduce trailing spaces so be those are not present.

### *BSR-6166 NTP client service fails on first boot*

**Solution:** Upon initial install NTP service can result in the failed state due to system time drift past the allowed sync threshold. Reboot the system after it has been registered and able to reach NTP server(s). If the service continues to enter failed state, set the system time manually and restart the ntp client service.

## For Assistance

- [Online Resources](#)
- [Contact RackTop](#)

## Online Resources

RackTop provides online resources to access documentation, software, and to open service requests. Use these resources to install and configure BrickStor software and to troubleshoot and resolve technical issues.

- RackTop Support site: <https://support.racktopsystems.com>
- Maintenance, Warranty and Policy Information: <https://www.racktopsystems.com/about-us/warranty-and-maintenance/>

## Contact RackTop

If you cannot resolve an issue using the online resources listed above, contact RackTop Support:

- Email RackTop Support: [support@racktopsystems.com](mailto:support@racktopsystems.com)
- Call RackTop Support: 1-888-472-2586