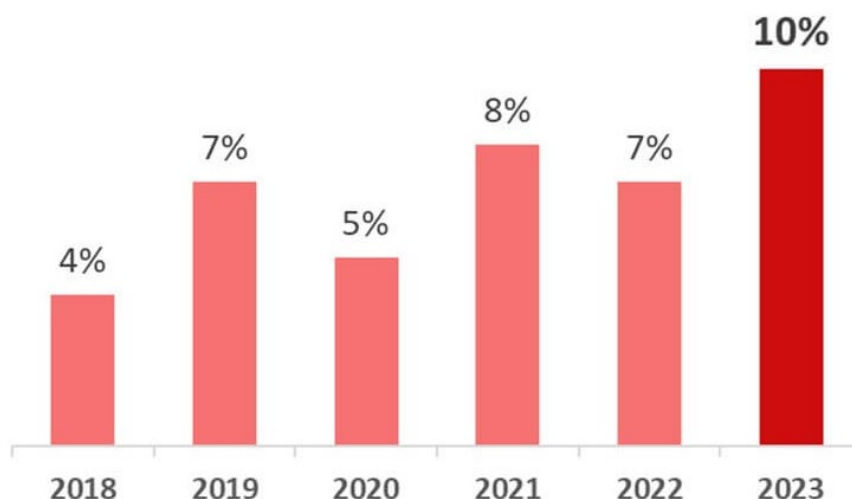


Ransomware Resilience with NetVault® Plus

Ransomware attacks continue to plague companies and non-profit organizations globally, causing irreparable harm and high cost. Add the negative impact to brand reputation and customer service, and you have a perfect storm.

Ransomware Impact on Organizations Reaching All-time High in 2023

(*global % of organizations targeted with ransomware attacks)



Source: Checkpoint Research Blog January 2024¹

According to Checkpoint Research, a staggering 1 in every 10 organizations worldwide were hit by attempted ransomware attacks in 2023, surging 33% from the previous year. Throughout 2023, organizations around the world have each experienced over 60,000 attacks on average - that's 1,158 attacks per organization per week.

Organizations need a backup solution that provides ransomware resilience in the face of this growing risk, to minimize data loss and business downtime. Quest® NetVault Plus does exactly this. NetVault Plus is a comprehensive data protection solution developed for most modern data center applications and infrastructure, as well as cloud solutions like Microsoft 365. It provides a wide range of ransomware protection, recovery and optimization capabilities.

PROTECT

Preparing for ransomware attacks involves a multilayered approach, and a solid backup and recovery solution is your last line of defense to minimize business risk. Cyber-attackers target both your production data stores as well as your backups, so your backup solution needs to protect both!

To start, NetVault Plus provides enterprise-class backup and recovery that is used by thousands of organizations globally. It protects a wide range of systems, applications and data, both on-premises and in the cloud. NetVault Plus offers continuous data protection (CDP) that performs incremental forever backups of VMware virtual machines and Microsoft 365 data to help speed backup and reduce risk of data loss and damage.

NetVault Plus includes a software-defined storage component that provides deduplication, compression, encryption, replication and cloud connection. To protect backup data, this storage technology uses an unpublished protocol called Rapid Data Access (RDA). Unlike Server Message Block (SMB), used for Windows shares, RDA is not an open protocol. It is not accessible directly by an operating system and has an authentication requirement that sits outside the local server or domain-controlled constructs.

NetVault Plus also provides data encryption during transmission and at rest, to ensure data is well protected both on-premises and in the cloud. By encrypting your data, you can reduce risk of unauthorized use and disclosure of confidential information. To address government data security requirements, NetVault Plus crypto module is certified for FIPS 140-2 Level.

NetVault Plus strengthens your ransomware protection, as backup jobs can be assigned as “immutable” such that the backup data cannot be overwritten, changed, deleted or encrypted during the backup retention policy—even by a NetVault administrator.

When using NetVault Plus, backup data flows directly from source to destination. There is no need to have traditional media servers. This reduces complexity and helps to reduce risk by having fewer core components that could be attacked.

On top of that, NetVault Plus employs Secure Connect technology that wraps the data transfer and control commands in a TLS 2.0 secure layer. This is a great step to restrict access to your backup data from ransomware.

NetVault Plus also provides object locking and cloud locking to ensure backups that are stored in object storage on-prem and in the cloud are made immutable, to prevent unauthorized changes and deletion.

With NetVault Plus, you can quickly and safely replicate backup data to enable a 3-2-1 backup strategy for disaster recovery. And for extra protection, NetVault Plus also offers air-gap backup to tape.

Of course, the NetVault Plus system itself has access to backup data, so we also need to consider that. Ransomware has been known to predominately target Windows-based systems, partly due to popularity, but also due to the number of existing user client/user endpoints that ransomware perpetrators can take advantage of. NetVault Plus reduces that threat by supporting system installation on Linux. While not completely invulnerable, installing the NetVault Plus system on Linux reduces the number of potential threats.

Another consideration is how system access is granted. NetVault Plus has two main methods for granting access: Integration with a directory service or its own role-based access mechanism. Given the risk of Active Directory Group Policy and Group Policy Object (GPO) attacks, we must consider that this level of compromise could allow access to the backup application where systemic data deletion could be achieved. While you can leverage Active Directory to control system access, NetVault Plus also provides robust role-based access without the need to use Active Directory. While this might be less convenient for user and group control, it does offer another degree of separation from the production environment and potential access by an unauthorized third party.

RECOVER

NetVault Plus makes recovery quick and easy. With powerful search and catalog tools, administrators can easily find what they need and immediately start recovery. When using NetVault Plus CDP for VMware, you get Instant Restore that allows you to instantly recover a virtual machine by mounting a VM snapshot image directly from the NetVault Plus deduplicated secondary storage repository. With NetVault Plus, you will reduce business downtime that affects all parts of the organization, including your reputation.

OPTIMIZE

NetVault Plus includes powerful automation to simplify data protection and increase IT staff productivity. It provides global source-side data deduplication and compression that accelerates backup and recovery while reducing storage requirements and costs by up to 93%. NetVault Plus' deduplication is far from ordinary. To start, it performs deduplication and compression across all your backup jobs for true global deduplication. It combines a variable-block deduplication chunking methodology with a contentaware algorithm that identifies patterns in the data, despite the shifting that results from additions or deletions in the data stream. In the end, you attain the best possible storage reduction available in the industry. This source-side deduplication also reduces the amount of data being sent over a network, from a client machine to storage, further reducing exposure to data capture techniques.

NetVault Plus' cloud tiering also helps optimize your backup data by keeping more recent backups on-prem and moving older backups to cloud. That way you can save money by using cloud storage versus on-prem storage. Cloud tiering will also help you recover your data faster as it will deliver the more recent backups from local disk while it's acquiring what it needs from the cloud.

KEY BENEFITS

In the end, even the most prepared organization can't completely protect itself against ransomware attacks. But you can limit the risks when you have a backup solution that not only allows you to restore all your data quickly and fully, but also:

- Mitigates the risks of ransomware impacting your business
- Reduces the number of core components that can be attacked
- Limits exposure to data capture techniques
- Restricts your backup data from ransomware

NetVault Plus provides ransomware resilience and delivers the protection, recovery and optimization capabilities demanding IT managers and executives seek in today's challenging high-risk environment.

For more information about NetVault Plus, visit [www. quest.com/products/netvault-plus](http://www.quest.com/products/netvault-plus).

About Quest Software

Quest Software creates technology and solutions that build the foundation for enterprise AI. Focused on data management and governance, cybersecurity and platform modernization, Quest helps organizations address their most pressing challenges and make the promise of AI a reality. Around the globe, more than 45,000 companies including over 90% of the Fortune 500 count on Quest Software. For more information, visit www.quest.com or follow Quest Software on [X](#) (formerly Twitter) and [LinkedIn](#).

© 2025 Quest Software Inc. ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software Inc.

The information in this document is provided in connection with Quest Software products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest Software products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST SOFTWARE ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF

MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest Software makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

Patents

Quest Software is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at www.quest.com/legal

Trademarks

Quest, Quest Software, Netvault and the Quest logo are trademarks of Quest Software Inc. For a complete list of Quest marks, visit <https://www.quest.com/legal/trademark-information.aspx>. All other trademarks are properties of their respective owners.

Refer to our website (www.quest.com) for regional and international office information.