

# NETGEAR® ReadyRECOVER™ Offsite Data Protection:

Replication Overview  
and Configuration Guide

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## READYRECOVER INTRODUCTION

ReadyRECOVER is a complete backup and recovery appliance designed for small and midsize businesses. Next-generation file system technology guarantees data integrity, efficient use of storage capacity and minimal impact to computing resources. With ReadyRECOVER, full backups are created every 15 minutes and can independently be used to quickly and reliably restore files, folders or complete systems to any platform, physical or virtual.

Traditional backup solutions create incremental “image chains” and require regular resource-draining full backup jobs to maintain data integrity and timely restore points. With ReadyRECOVER, each backup is a space-efficient recovery point that never requires image chain management or consolidation. In addition, each backup captures the entire target system, the Windows operating system, all services, all applications, all settings and all data for fast full system recovery.

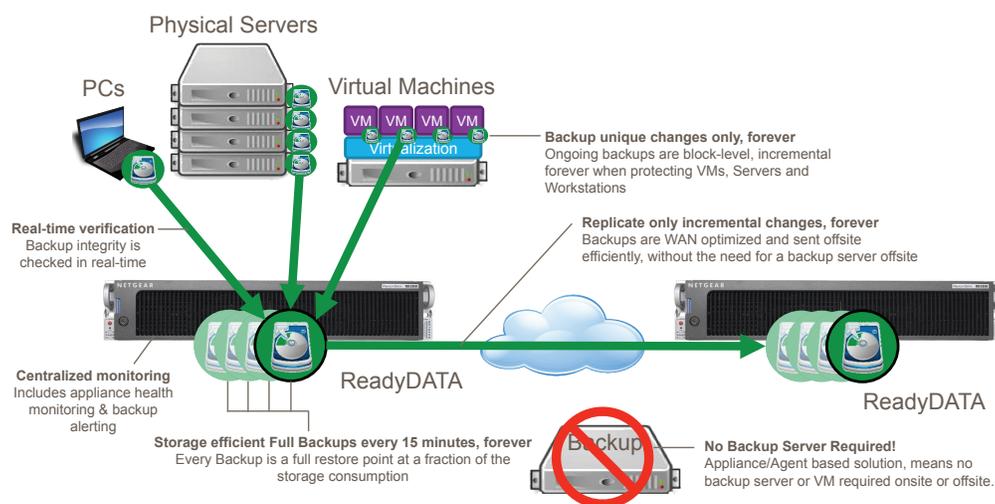
ReadyRECOVER is a seamless integration of the ReadyDATA® unified storage platform from NETGEAR and ShadowProtect backup and recovery software from StorageCraft.

## OFFSITE DATA PROTECTION CHALLENGES

Traditional backup solutions have limitations that restrict the ability to protect business data. More importantly, these limitations hinder the ability to recover data when needed or fail to do so in a timely manner to get business operations back online. Specifically, traditional backup solutions are often unable to easily send backups offsite where they are safe from disaster.

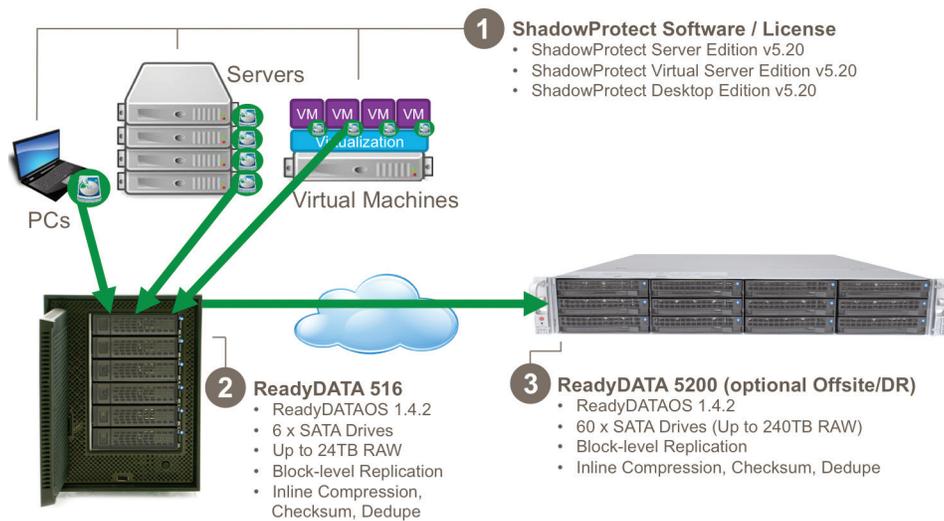
## READYRECOVER BACKUP AND STORAGE ARCHITECTURE

ReadyRECOVER combines StorageCraft ShadowProtect backup software and NETGEAR ReadyDATA storage to deliver a unique backup and disaster recovery solution.



To address common backup challenges, ReadyRECOVER offers:

1. Fast and frequent backups, using block-level incremental forever technology. After the first full backup, never again run a slow running full backup. Most backup software claims to include incremental forever technology, but do not truly deliver on “forever” and often require monthly or yearly full backups, with incremental backups in between.
2. Real-time verification on write, so that backups can run around the clock without the need for verification jobs or maintenance operations.
3. Centralized monitoring and alerting of backup tasks, agent health, storage consumption, and RAID/disk state.
4. WAN optimized replication means only unique backup data is ever replicated, delivering significant bandwidth savings.
5. Support for Windows-based Servers, Virtual Machines, Workstations and Laptops with support for all major Virtualization platforms including VMware, Hyper-V and XenServer. (Note: Guest OS must be Microsoft Windows, for more information visit <http://www.netgear.com/ReadyRECOVER>)



## SOLUTION COMPONENTS

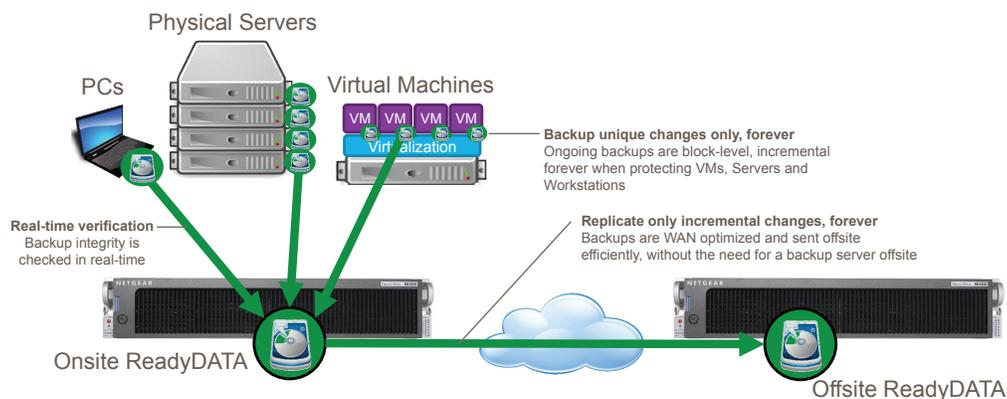
ReadyRECOVER is the combination of ReadyDATA storage and StorageCraft ShadowProtect:

1. StorageCraft ShadowProtect Licenses and Software for each Server, VM, or Workstation to be protected. Minimum ShadowProtect software version must be 5.20.
2. ReadyDATA 5200 or ReadyDATA 516 running firmware ReadyDATAOS 1.4.2 or later with appropriately sized hard drives.
3. [Optional, but highly recommended] A second ReadyDATA in an offsite location for disaster recovery.

## REPLICATE BACKUP DATA OFFSITE FOR DISASTER RECOVERY

To offer additional protection against disaster, ReadyDATA offers the ability to replicate ReadyRECOVER backups offsite to a secondary ReadyDATA system.

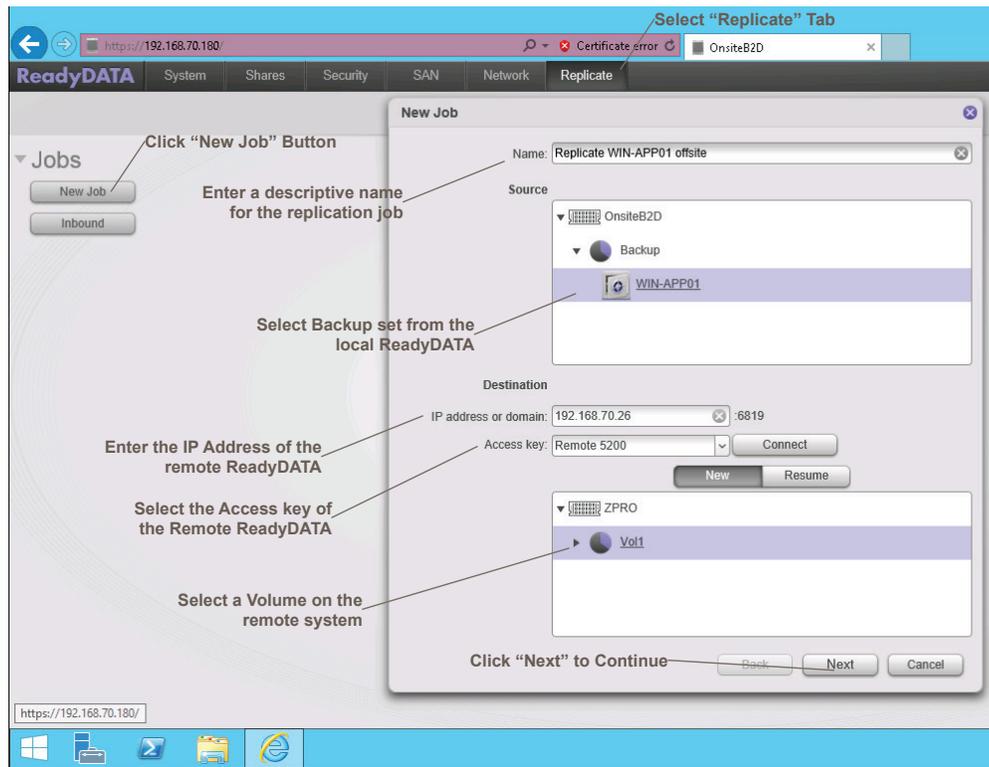
One of the largest deployment considerations when setting up offsite data replication is the ongoing WAN bandwidth requirement. The best way to deliver fast and effective offsite replication is to reduce the amount of data being replicated. Combining ReadyRECOVER block-level change tracking with ReadyDATA replication will maximize WAN bandwidth efficiency when replicating backups to an offsite location. Much like the backup process itself, ongoing replication will only ever need to send incremental block-level changes after the first successful full replication cycle (forever).



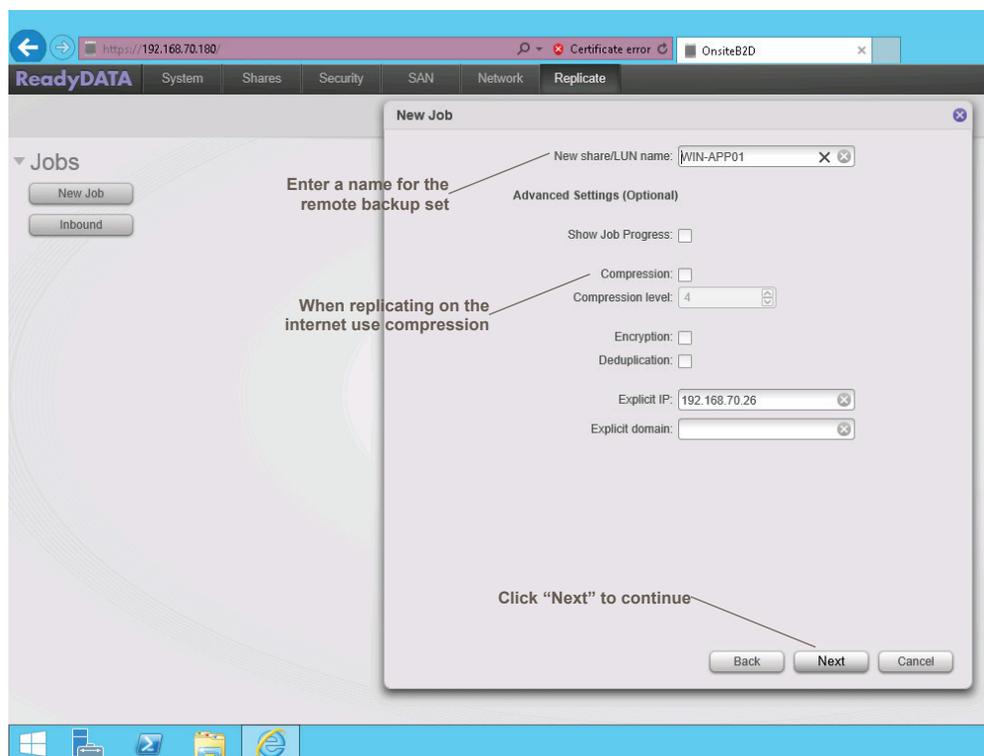
To configure replication of a Backup Set to a secondary location, you will need to have deployed a secondary system in the desired location, enabled replication services on that system, and copied the replication certificate key from the secondary system to the primary system. The certificate key can be found in the ReadyDATA administration console (Replicate Tab > Certificates).

Steps to configure replication of ReadyRECOVER Backups:

1. Connect to the onsite ReadyDATA with a supported web browser.
2. Select the "Replicate" tab for the top menu.
3. Click the "New Job" button.
4. Give the replication job a unique and descriptive name.
5. Expand the source system and select the source Backup Set.
6. Enter the IP Address of the destination system. (Note: this address must be accessible from the source system. For WAN replication, port forwarding through firewalls on the remote site may be need.)
  - a. For an alternative option that does not require manual port forwarding, ReadyDATA's cloud-managed replication can be used. Please reference the ReadyDATA OS Software Manual for setup instructions. This document is available on the resource CD that came with your ReadyDATA. You can also obtain these manuals by clicking the ? icon in the ReadyDATA dashboard.
7. Select the "Access key" (Certificate) from the dropdown list and click "Connect".
8. Select a volume from the remote ReadyDATA as a destination for replication.
9. Click the "Next" button to continue the wizard.

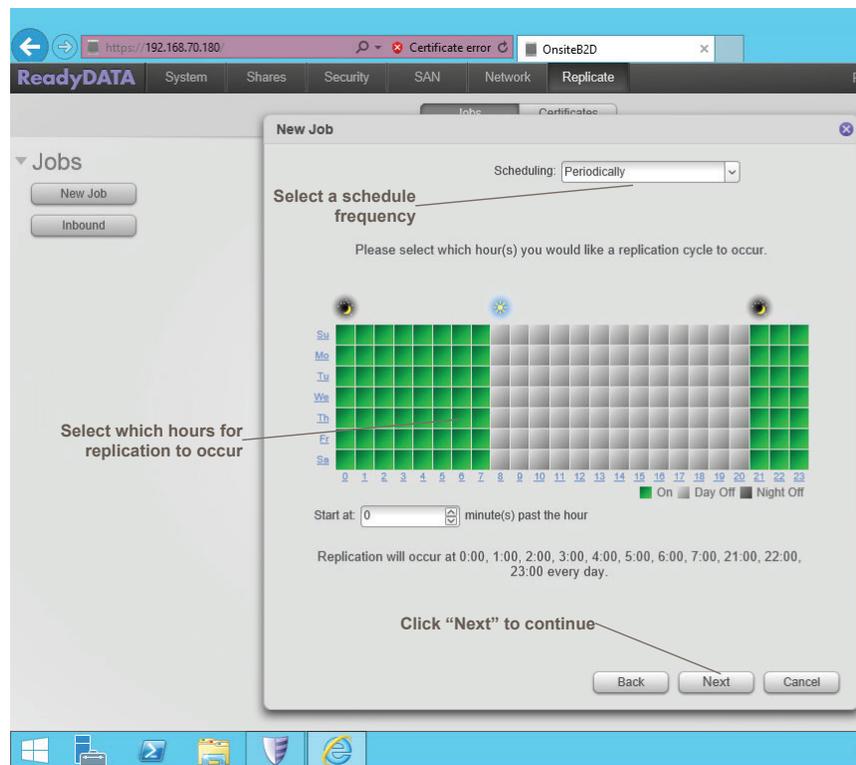


1. Enter a unique name for the remote Backup Set
2. [Optional] When replicating over a public network or limited bandwidth connection, it is recommended to select "Compression"
3. Click the "Next" button to continue



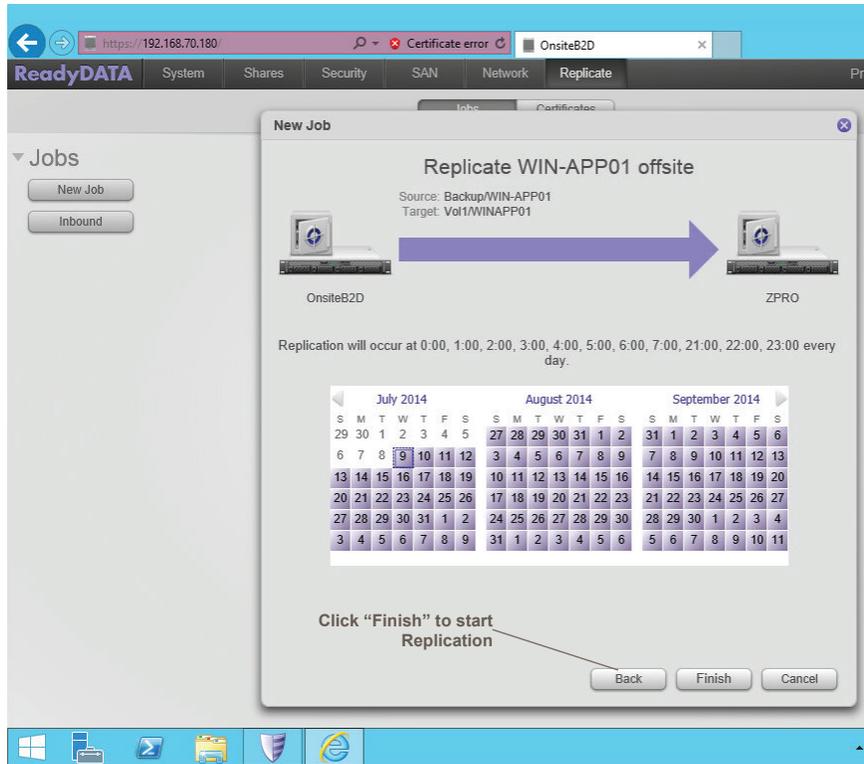
Select the frequency of the replication. This is an important decision based on recovery requirements and environmental factors such as connectivity between ReadyDATA systems.

Periodic replication is recommended for ReadyRECOVER installations. Replication can be scheduled on an hourly basis to meet aggressive recovery point objectives (RPOs) at offsite locations. However, for environments with restricted bandwidth, it is recommended to schedule periodic replication outside of business hours.

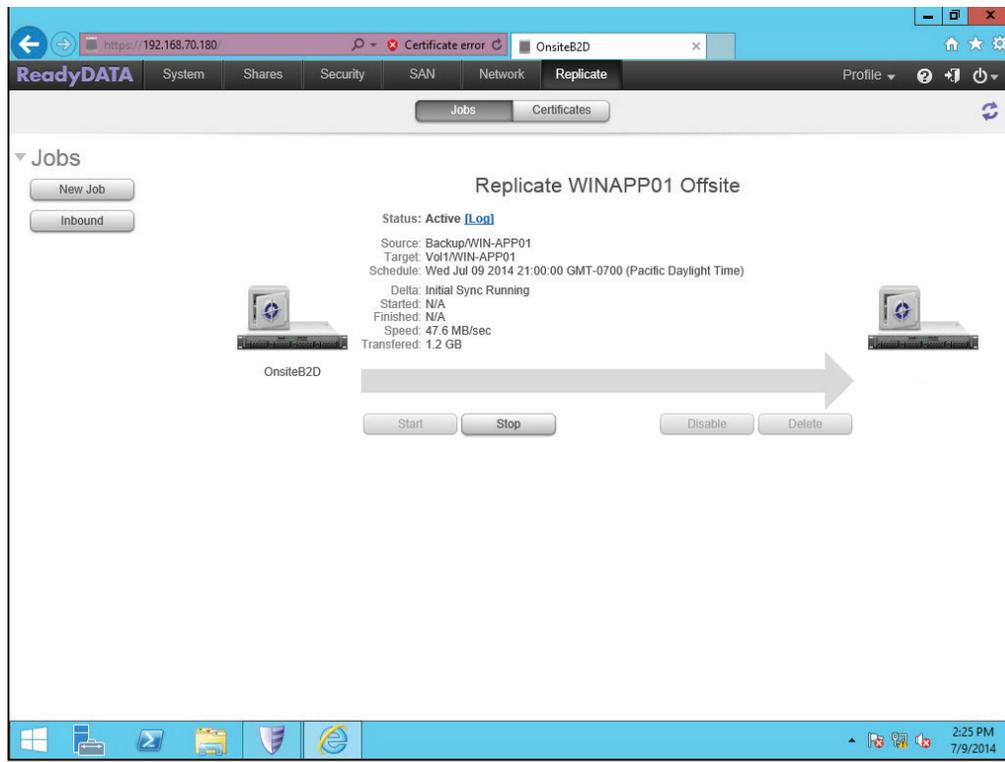


Once you have selected an appropriate replication frequency, press the "Next" Button to continue.

Finally, click the “Finish” Button to complete the replication wizard.



Once the wizard is complete, the replication job is ready to run its first replication cycle.



## CONCLUSION

Protecting business data is a top concern for IT administrators. Administrators who seek to deliver granular recovery points as part of a disaster recovery strategy must overcome common backup challenges.

ReadyRECOVER offers the ability to replicate backups offsite to a secondary system. The best way to deliver fast and effective offsite replication is to reduce the amount of data being replicated. Combining ReadyRECOVER block-level change tracking with ReadyDATA replication will maximize WAN bandwidth efficiency when replicating backups to an offsite location. Much like the backup process itself, ongoing replication will only ever need to send incremental block-level changes after the first successful full replication cycle (forever).

This document describes ReadyRECOVER's replication technology and offers configuration guidance. For additional assistance or product information, reach out to an authorized NETGEAR reseller (<http://www.netgear.com/business/buy/#tab-authorizedresellers>).