# NetApp

# Overview

## SANtricity 11.8

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# Overview

## Asynchronous mirroring overview

The Asynchronous Mirroring feature provides a controller-level, firmware-based mechanism for data replication between a local storage array and a remote storage array.

### What is asynchronous mirroring?

*Asynchronous mirroring* captures the state of the primary volume at a particular point in time and copies just the data that has changed since the last image capture. The primary site can be updated immediately and the secondary site can be updated as bandwidth allows. The information is cached and sent later, as network resources become available.

Asynchronous mirroring is created on a per-volume basis but managed at a group level, allowing you to associate a distinct remote mirrored volume with any primary volume on a given storage array. This type of mirroring is ideal for satisfying the demand for non-stop operations and, in general, is far more network efficient for periodic processes.

Learn more:

- How asynchronous mirroring works
- Asynchronous mirroring terminology
- Asynchronous mirror status
- Volume ownership
- Role change of a mirror consistency group

### How do I configure asynchronous mirroring?

You must use the Unified Manager interface to perform the initial mirroring configuration between the arrays. Once it is configured, you can manage mirrored pairs and consistency groups in System Manager.

Learn more:

- Requirements for using asynchronous mirroring
- Workflow for mirroring a volume asynchronously
- Create asynchronous mirrored pair (in Unified Manager)

### Related information

Learn more about concepts related to asynchronous mirroring:

- What you need to know before creating a mirror consistency group
- What you need to know before creating a mirrored pair
- How asynchronous mirroring differs from synchronous mirroring

# Synchronous mirroring overview

The Synchronous Mirroring feature provides online, real-time data replication between storage arrays over a remote distance.

ⓘ  | This feature is not available on the EF600 or EF300 storage system.

## What is synchronous mirroring?

*Synchronous mirroring* replicates data volumes in real time to ensure continuous availability. Storage array controllers manage the mirroring operation, which is transparent to host machines and software applications.

This type of mirroring is ideal for business continuity purposes such as disaster recovery.

Learn more:

- How synchronous mirroring works
- Synchronous mirroring terminology
- Synchronous mirroring status
- Volume ownership
- Role change between volumes in a mirrored pair

## How do I configure synchronous mirroring?

You must use the Unified Manager interface to perform the initial mirroring configuration between the arrays. Once it is configured, you can manage mirrored pairs in System Manager.

Learn more:

- Requirements for using synchronous mirroring
- Workflow for mirroring a volume synchronously
- Create synchronous mirrored pair (in Unified Manager)

## Related information

Learn more about concepts related to synchronous mirroring:

- What you need to know before creating a mirrored pair
- How asynchronous mirroring differs from synchronous mirroring

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