

Contents

What SnapLock is	9
How SnapLock works	9
Hardware platforms supported for SnapLock	10
Licensing SnapLock functionality	10
Enabling the SnapLock functionality	11
SnapLock and AutoSupport messages	11
What ComplianceClock is	12
What system ComplianceClock is	12
What volume ComplianceClock is	12
Initializing the system ComplianceClock	13
Viewing the system ComplianceClock and volume ComplianceClock time	13
Upgrade considerations for ComplianceClock	14
How the volume ComplianceClock impacts SnapLock operations	15
Operations that might affect volume ComplianceClock time	15
Creating SnapLock volumes	16
Creating SnapLock traditional volumes	16
Creating SnapLock aggregates and their flexible volumes	17
SnapLock Compliance write verification option	18
Using the SnapLock Compliance write verification option	18
What a WORM file is	19
How to manage WORM data	20
Transitioning data to the WORM state	20
Determining the WORM status of a file	21
Extending the retention date of a WORM file	22
What the WORM append file is	23
Creating a WORM append file	23
What retention period is	25
How the SnapLock volume retention period works	26
Viewing the retention period of a volume	26
What the minimum retention period is	27
Setting the minimum retention period	28

Enabling the SnapLock functionality

After installing the SnapLock license, you must also enable the functionality.

Before you begin

You must have licensed the SnapLock Compliance, SnapLock Enterprise or both the functionalities.

About this task

Note: If your storage system contains SnapLock license and you upgrade to Data ONTAP 8.2, the SnapLock functionality will be enabled by default.

Steps

1. Depending on your requirement, complete one of the following steps:

If you want to...	Enter the following command...
Enable the SnapLock Enterprise functionality	<code>options licensed_feature.snaplock_enterprise.enable on</code>
Disable the SnapLock Enterprise functionality	<code>options licensed_feature.snaplock_enterprise.enable off</code>

2. Depending on your requirement, complete one of the following steps:

If you want to...	Enter the following command...
Enable the SnapLock Compliance functionality	<code>options licensed_feature.snaplock.enable on</code>
Disable the SnapLock Compliance functionality	<code>options licensed_feature.snaplock.enable off</code>

After you finish

Initialize the system ComplianceClock.

SnapLock and AutoSupport messages

If you enable the AutoSupport feature, the storage system sends AutoSupport messages to technical support. AutoSupport messages include event, log-level descriptions, SnapLock volume state and options.

The AutoSupport messages also contain the system ComplianceClock time, the volume ComplianceClock time of all the SnapLock volumes, and the expiry date of all volumes on the storage system.

Note: AutoSupport messages do not include options such as a privileged delete setting.

To know more about the AutoSupport messages, see the *Data ONTAP System Administration Guide for 7-Mode*.

What ComplianceClock is

ComplianceClock is a secure time base that prevents compliant data from being tampered with. ComplianceClock makes it impossible to prematurely modify or delete data by altering system clock.

Starting with Data ONTAP 8.1, there are two types of ComplianceClock—volume ComplianceClock and system ComplianceClock. These two types of ComplianceClock minimize the ComplianceClock lag and enable the expiry of WORM files with extended retention.

Related concepts

What the extended date range mechanism is on page 112

What system ComplianceClock is

A system ComplianceClock is a secure time base for each storage system. The system ComplianceClock provides the initial value for volume ComplianceClock when a new SnapLock volume is created.

The system ComplianceClock configuration is used as a reference time for updating the volume ComplianceClock.

What volume ComplianceClock is

The volume ComplianceClock is a time-based security feature for each volume. The volume ComplianceClock is used to determine the expiry date of WORM files and Snapshot copies in a SnapLock volume.

The volume ComplianceClock is initialized automatically during the creation of a new SnapLock volume. When a new SnapLock volume is created, the volume ComplianceClock gets its initial time from the system ComplianceClock time.

Since, each SnapLock volume maintains its own volume ComplianceClock value; therefore, a change in the ComplianceClock value of one volume does not affect the ComplianceClock of any other volume.

How volume ComplianceClock interacts with the system ComplianceClock

The volume ComplianceClock obtains its starting value from the system ComplianceClock time when a new volume is created. Therefore, a continuous association is maintained between the volume ComplianceClock and system ComplianceClock. This association minimizes the instances of ComplianceClock lag.