Dell Technologies PowerStore Storage Replication Adapter (SRA) Plugin for VMware Site Recovery Manager 2.1.1

Security Configuration Guide

Version 1.0

Revision History

Revision	Date	Description
01	February 2024	Initial release of version 1.0

Notes, cautions, and warnings

NOTE: A NOTE indicates important information that helps you make better use of your product.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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1 Preface

Dell Security Configuration guide helps you understand the security features and capabilities of the Storage Replication Adapter (SRA) for VM ware Site Recovery Manager. This guide provides an overview of the security configuration controls and settings available in SRA. This guide is intended to help facilitate secure deployment, usage, and maintenance of the software in SRA.

Topics:

- Legal disclaimers
- Scope of document
- Document references
- Security resources
- Getting help
- Reporting security vulnerabilities

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Scope of document

This document describes the security and configuration requirements for PowerStore Storage Replication Adapter (SRA) Plugin for VMware Site Recovery Manager 2.1.1. The document also provides information about the steps that are involved in terms of security.

Document references

You can find information that is related to the features and functionalities in the following documents available from the VMWare Online Support site:

• SRA Release Notes

Security resources

See the vSphere Security Configuration Guide document for security resources:

Site Recovery Manager Security (<u>https://docs.vmware.com/en/Site-Recovery-Manager/8.8/srm-</u>

security-8-8.pdf)

You can also see Dell security on the following websites:

- Dell Security (https://www.dell.com/en-us/dt/about-us/security-and-trust-center/)
- Dell Support (<u>https://www.dell.com/support/home/en-us</u>)

Getting help

Go to Dell Support (<u>https://www.dell.com/support/home/en-us</u>) and click **Services Center**. You can see several options for contacting Dell Technical Support. To open a service request, you must have a valid support agreement. Contact your Dell sales representative for details about obtaining a valid support agreement or with questions about your account.

To provide feedback on this documentation, email Dell at support@dell.com.

Reporting security vulnerabilities

Dell takes reports of potential security vulnerabilities in all Dell products seriously. If you discover a security vulnerability, you are encouraged to report it to Dell immediately.

For the latest on how to report a security issue to Dell, see the Dell Vulnerability Response Policy(<u>Dell</u> Vulnerability Response Policy | Dell US) on Dell website.

2 Security Quick Reference

Topics:

- Deployment models
- Security profiles

Deployment models

SRA provides installer file to be installed in Site Recovery Manager (SRM) and approach to upgrade.

See the chapter Installation in SRA Release Notes for the details to install and uninstall SRA.

Security profiles

SRA is a software package that implements the SRA interface between VMware Site Recovery Manager (SRM) and replicated storage arrays.

SRA is installed and configured via SRM GUI without any required security settings. It is running as an internal module within SRM and is managed by SRM. There is no access to SRA from outside the SRM.

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Product and Subsystem Security

Topics:

- Security controls map
- Authentication
- Authentication types and setup
- Login security settings
- User and credential management
- Authentication to external systems
- Authorization
- RBAC privileges
- Network security
- Data security
- Cryptography
- Auditing and logging
- Security updates
- Protect authenticity and integrity
- VSI certificate management

Security controls map

SRA is a single component that is installed and running in SRM. It acts as an interface between SRM and the storage array. You can trigger a SRM workflow on SRM GUI which includes processing of several SRM commands.

The total flow to process a SRM command is as follows:

- SRM sends command request to SRA.
- SRA makes one or more requests to the storage array to perform the required tasks.
- SRA returns command response to SRM.

Authentication

There is no access to SRA as SRA is running as an internal module within SRM. No authentication is required.

Authentication types and setup

N/A

Login security settings

There is no login required by SRA.

Login banner configuration

N/A

Failed login behavior

N/A

User and credential management

SRA User Management

SRA does not include any user management.

Authentication to external systems

SRA sends REST API requests to storage array when processing a command request from SRM. SRA communicates with the storage array by using the HTTPS protocol with TLS v1.2. The storage array's IP address and credential are passed from SRM to SRA in each command request. The credential is managed by SRM. Refer to <u>Site Recovery Manager Storage Credentials (vmware.com)</u>.

Authorization

There is no user access control in SRA.

RBAC privileges

N/A as SRA does not have user access control.

Network security

N/A as SRA does not support network access.

Data security

N/A as SRA itself does not store any data.

Cryptography

N/A as SRA does not require any encryption and decryption.

Certificate management

N/A SRA does not require a certificate.

Auditing and logging

The logging of SRA is controlled by SRM. The SRA logs are included in the SRM log bundle which can be fetched from SRM GUI.

Protect authenticity and integrity

The SRA-PowerStore gzip file that is digitally signed is from the released zip file.

Dell uses GPG code signing. A private key is used to sign the gzip file (that is, generate a signature file based on the content of the gzip file), and you can use a public key that is contained in the released zip file to verify the signature. If the verification is successful, then you can be certain that the binaries are not corrupted or have been tampered with.

For the digital signature verification procedure, please refer to the SRA Release Notes chapter of "Verifying the digital signature on systems running Linux".

A Glossary

Topics:

• Term/definition

Term/definition

Term	Definition
SRA	Storage Replication Adapter. Allows VMware Site Recovery Manager (SRM) to implement disaster recovery for PowerStore clusters.
SRM	Site Recovery Manager. VMware Site Recovery Manager is a business continuity and disaster recovery solution that helps plan, test, and run the recovery of virtual machines between a protected vCenter Server site and a recovery vCenter Server site.