PoINT Data Replicator

System Requirements

PoINT Software & Systems GmbH

A publication of:
PoINT Software & Systems GmbH
Eiserfelder Str. 316
57080 Siegen, Germany

Phone: +49 (0) 271 / 3841 - 0
Mail: info@point.de
Web: www.point.de

Document Version: 021-20260430-DG
Product Version: 3.1

Contents

History of Document

Document Version	Modification Date	Product Version	Modifications
1.0	08/25/2023	2.2 Update 2	
1.1	07/02/2024	2.3	Required .NET version is now 8.0
2.0	11/20/2025	3.0	Hardware and OS requirements are redefined for the various services. Restrictions for file-based storage are defined.
2.1	04/30/2026	3.1	Updated product version to 3.1

1 Overview

PoINT Data Replicator allows replicating objects from a file system or an S3 compatible object storage to another S3 compatible object storage. In case of a file system source, the path names of the source files will be used as object identifier on the target storage so that the generated file structure will match the source system.

2 System Requirements

2.1 Operating System

The PDR Coordinator Service and the PDR Data Mover Service have been tested on the following operating systems, but they should work on all platforms which are supported by the .NET 8.0 framework.

- Windows Server 2025
- Windows Server 2022
- Windows Server 2019
- Windows Server 2016
- Windows 11
- Windows 10
- Ubuntu 20, 22 and 24
- Red Hat Enterprise Linux 9

In a Multi Node installation, if data movement to or from a file-based storage system is desired, both the PDR Coordinator Service and the PDR Data Mover service must be installed on systems with operating systems that can access this file-base storage (see Section 3.2).

The web-based user interface can be accessed with an HTML5 compliant web browser. JavaScript must be enabled in browser settings.

2.2 .NET Runtime

The ASP.NET Core Runtime 8.0 and .NET Runtime 8.0 are required to run the PoINT Data Replicator service. Please use the following link for information how to download and install .NET on your operating system:

https://dotnet.microsoft.com/download/dotnet/8.0

On Windows you can download and install the 'Hosting Bundle'. On Linux you need both, the .NET Runtime and ASP.NET Core Runtime.

2.3 Hardware

The PDR Coordinator Service and the PDR Data Mover Service have different hardware requirements. The following subsections outlines these requirements, respectively.

2.3.1 PDR Coordinator Service

The PDR Coordinator Service is responsible for communicating with all the Data Movers in the system. It uses databases stored locally to maintain and monitor the state of the Data Movers, so in the event of a shutdown, no information is lost. Its most important requirement is therefore to have a fast storage disk to store these databases so that database operations can be performed quickly.

The requirements for the PDR Coordinator Service are as follows:

- At least 16 GiB RAM and additionally 2 GiB per active task.
- One or more x64 compatible CPUs with in total at least 2 cores per active task.
- A locally attached SSD or NVME with space for about 2 KiB per managed object.

Note: Active tasks are tasks that are running a job, such as a Copy Job. In order to save on resources, scheduled Copy Jobs can be configured. This would reduce the amount of time that the task is active. A task is also considered active if a notification service is configured and enabled (Kafka, SQS).

Note: For Single Node installations, the requirements of the Data Mover Service are added on to the base requirements of the Coordinator Service.

2.3.2 PDR Data Mover Service

A Data Mover's primary function is to perform the copying of the data from a source system to a target system. The process of copying involves holding the contents of the objects being copied in memory. Therefore, an important requirement of a Data Mover is to have sufficient memory, especially if large objects will be copied.

A Data Mover uses a configurable number of so-called "workers" which perform the actual copying of data. Each of the configured workers will process a set of objects from the tasks which are currently active, so that the total number of workers can be higher or smaller than the number of active tasks, depending on the performance requirements.

The requirements for a PDR Data Mover Service are as follows:

- RAM requirements:
    - At least 12 GiB RAM and additionally at least 5 GiB per worker are required as described below.
    - For disk-based target storage systems, 12 GiB of RAM are recommended per worker.
    - If the target storage is the tape class of PoINT Archival Gateway, 12 GiB of RAM per PVA are required. For example, if a job aims to stream to 2 PVAs, then 24 GiB are required per worker.
- One or more x64 compatible CPUs with in total at least 2 cores per worker.

Note: The performance of the Data Mover varies depending on the CPU speed. As an estimate, a CPU with 8 cores will result in a transfer rate of approx. 1 GiB/s.

2.4 Network

While there are no hard requirements for network performance, a suitable network connection between each PDR Data Mover Service and the source/target systems is required. The connection between PDR Coordinator and PDR Data Mover Services does not need a high bandwidth, but should provide low latency.

3 Supported Source/Target Systems

3.1 S3 Compatible Object Storage

PoINT Data Replicator supports object storage systems which are compatible to the S3 protocol. It supports S3 signature versions 2 and 4. Object storage can be used as source or target systems.

Source data which is stored on a storage class which requires a separate restore command, e.g. Glacier or Deep Archive, cannot be accessed, unless the restore has been performed using another application.

3.2 File-based Storage

PoINT Data Replicator can use any file-based storage system as source storage, if the file system can be mounted by the operating system of the PDR Coordinator Service and all PDR Data Mover Service nodes. In other words, access to the file-based storage system must be possible using the exact same path. For example, a Multi Node installation will not support copying to or from a local drive letter because this drive letter will not be available on all nodes.

On Linux systems, it is necessary to mount network shares into the local file system using the same mount point on all nodes. Access to network shares using UNC-paths is only supported on Windows platforms.

File systems cannot be used as target systems except to restore data which has been copied to S3 storage by PoINT Data Replicator.