

下記の表は、LifeKeeper for Linux v9環境でご利用いただくことができる、認定済の共有ストレージ一覧表です。ハードウェアの構成様式にご利用ください。

【認定済共有ストレージについて】

LifeKeeperの共有ストレージとして利用するストレージは、種類によって認定が必要なものと不要なものがあります。

SCSI / FC / iSCSI / SAS など、LifeKeeperがSCSI-2/3 Reservationを用いてIOフェンシングを行うことが前提となる、複数ノードで同一のデータを参照する共有ストレージは認定されたものをご利用いただく必要があります。下記の表に記載があるをご確認ください。

またQuorum/Witness Server KIXを用いてSCSI-2/3によるReservationを行わないことが利用前提となっているストレージについても、同じく認定が必要です。表での「確認を要しない」とは、

【認定済不承認構成】

以下の構成においては、ストレージ認定がございません。

- NASストレージ(NAS Recoveryが必要です)
- DataKeeperによるDataReplicationを構成するディスク装置全般(内蔵、外付けを問いません)

【ご利用いただけるハードウェア】

- USBやIEEE1394などで接続する、コンシューマ向けストレージの利用はサポートされません。

ベンダー名 (*1)	ストレージモデル名	バスタイプ	接続構成 (*2)	サポート可否	必要なARK (*3) (マルチパスARK等)	サポートする LUNのバージョン (*4)	注意事項	
DELL	Dell EqualLogic: P54100 P54110 P54210 P55100 P56110 P56210 P56410	iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1	LUN が多い場合 (20 以上) は、 /etc/default/llnkeeper の REMOTEMOUNTOUT 設定を REMOTEMOUNTOUT=600 に変更してください。	
			Single Path (DMMP)	YES	DMMP ARK			
		MD3800r MD3805f MD3860f	FC	vSphere (RDM)	No	-		v9.0 - v9.3.1
				Multi Path (DMMP)	YES	DMMP ARK		
	MD3800i MD3860i MD3860f	iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1		
			Single Path	No	-			
	MD3400 MD3420 MD3460	SAS	vSphere (RDM)	No	-	v9.0 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
	SCV3000 Series: SCV3000 SCV3020	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	No	-			
			Multi Path (DMMP)	YES	DMMP ARK			
		iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1		
			Single Path	No	-			
		SAS	vSphere	No	-	v9.0 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
		SCV2000 Series: SCV2000 SCV2020 SCV2080	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1	
				Multi Path (DMMP)	YES	DMMP ARK		
			iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1	
				Single Path	No	-		
	Dell Storage: SC5200 SC5250 SC4020	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	No	-			
			Multi Path (DMMP)	YES	DMMP ARK			
iSCSI		Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1			
		Single Path	No	-				
Dell Compellent: SC9000 SC8000		FC	vSphere (RDM)	No	-	-		
			Multi Path (DMMP)	No	-			
		iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1		
			Single Path	No	-			
Fujitsu		ETERNAUS: DX60 S2 DX80 S2 DX90 S2 DX100 S2 DX140 S2 DX180 S2 DX200 S3 DX250 S3 DX600 S3 DX8700 S3 DX9900 S3 DX2009	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1	
				Multi Path (DMMP)	YES	DMMP ARK		
	Single Path			No	-			
	Multi Path (EMPD)			YES	No Multipath ARK			
	Single Path			YES	No Multipath ARK			
	Single Path			YES	No Multipath ARK			
	iSCSI		Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1		
			Multi Path (EMPD)	YES	No Multipath ARK			
			Single Path	No	-			
			Single Path	YES	No Multipath ARK			
			Single Path	YES	No Multipath ARK			
			Single Path	YES	No Multipath ARK			
	Hitachi Virtual Storage Platform G1000 Hitachi Virtual Storage Platform G1500 Hitachi Virtual Storage Platform F1500	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (HCLM)	YES	HELH ARK			
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	YES	-			
		iSCSI	Multi Path (HCLM)	No	-	-		
			Single Path	No	-			
			Single Path	No	-			
			Single Path	No	-			
		Hitachi Virtual Storage Platform	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1	
				Multi Path (HCLM)	YES	HELH ARK		
			iSCSI	Multi Path (HCLM)	No	-	-	
				Single Path	No	-		
Hitachi Virtual Storage Platform Mid Range Family: Hitachi Virtual Storage Platform F900 (VSP F900) Hitachi Virtual Storage Platform F700 (VSP F700) Hitachi Virtual Storage Platform F370 (VSP F370) Hitachi Virtual Storage Platform F350 (VSP F350) Hitachi Virtual Storage Platform G900 (VSP G900) Hitachi Virtual Storage Platform G700 (VSP G700) Hitachi Virtual Storage Platform G370 (VSP G370) Hitachi Virtual Storage Platform G350 (VSP G350) Hitachi Virtual Storage Platform G150 (VSP G150) Hitachi Virtual Storage Platform G130 (VSP G130)	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (HCLM)	YES	HELH ARK				
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	YES	No Multipath ARK				
	iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1			
		Single Path	YES	No Multipath ARK				
		Single Path	YES	No Multipath ARK				
		Single Path	YES	No Multipath ARK				
	Hitachi Virtual Storage Platform Mid Range Family: Hitachi Virtual Storage Platform F800 (VSP F800) Hitachi Virtual Storage Platform F600 (VSP F600) Hitachi Virtual Storage Platform F400 (VSP F400) Hitachi Virtual Storage Platform G800 (VSP G800) Hitachi Virtual Storage Platform G600 (VSP G600) Hitachi Virtual Storage Platform G400 (VSP G400) Hitachi Virtual Storage Platform G200 (VSP G200) Hitachi Virtual Storage Platform G100 (VSP G100)	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (HCLM)	YES	HELH ARK			
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	YES	No Multipath ARK			
iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1				
	Single Path	YES	No Multipath ARK					
	Single Path	YES	No Multipath ARK					
	Single Path	YES	No Multipath ARK					
Hitachi Unified Storage VM (HUS VM)	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (HCLM)	YES	HELH ARK				
	iSCSI	Multi Path (HCLM)	No	-	-			
		Single Path	No	-				
Hitachi Unified Storage 100 Series: Hitachi Unified Storage 150 (HUS 150) Hitachi Unified Storage 130 (HUS 130) Hitachi Unified Storage 110 (HUS 110)	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (HCLM)	YES	HELH ARK				
	iSCSI	Multi Path (HCLM)	No	-	-			
		Single Path	No	-				
Hitachi	BR1200	iSCSI	Multi Path (HCLM)	No	-	-		
			Multi Path (DMMP)	No	-			
		SAS	Multi Path (RDAC)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Single Path (RDAC)	YES	No Multipath ARK			
	BR1250	iSCSI	Multi Path (HCLM)	No	-	-		
			Multi Path (DMMP)	No	-			
		SAS	Multi Path (NECSPS)	YES	NEC SPS ARK	v9.0 - v9.3.1		
			Single Path (NECSPS)	YES	NEC SPS ARK			
	BR1650E BR1650S	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (HCLM)	YES	HELH ARK			
		iSCSI	Multi Path (HCLM)	No	-	-		
			Single Path	No	-			
HPE	Nimble Storage: AF20 AF20Q AF40 AF60 AF80 AF1000 AF3000 AF5000 AF7000 AF9000 CS1000H CS1000 CS3000 CS5000 CS7000 HF20C HF20H HF20 HF40 HF60	iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.2.2 - v9.3.1		
			Single Path	No	-			
			Multi Path (RDAC)	YES	No Multipath ARK			
			Single Path (RDAC)	YES	No Multipath ARK			
			Multi Path (HCLM)	No	-			
			Multi Path (DMMP)	No	-			
		FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	No	-			
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	No	-			
			Single Path	No	-			
	3PAR: 3PAR StoreServ 8300 3PAR StoreServ 8400 3PAR StoreServ 8440 3PAR StoreServ 8450	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	No	-			
			Single Path	No	-			
		FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	No	-			
			Single Path	No	-			
		iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1		
			Single Path	No	-			
			Single Path	No	-			
			Single Path	No	-			
	3PAR: 3PAR StoreServ 7200 3PAR StoreServ 7200c	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	No	-			
			Single Path	No	-			
		FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	No	-			
			Single Path	No	-			
		iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1		
			Single Path	No	-			
			Single Path	No	-			
			Single Path	No	-			
	3PAR: 3PAR StoreServ 9450 3PAR StoreServ 20800 R2 3PAR StoreServ 20840 R2 3PAR StoreServ 20850 R2	FC	vSphere (RDM)	YES	No Multipath ARK	v9.2.1 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	No	-			
			Single Path	No	-			
		FC	vSphere (RDM)	YES	No Multipath ARK	v9.1 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	No	-			
			Single Path	No	-			
		iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1		
			Single Path	No	-			
			Single Path	No	-			
			Single Path	No	-			
3PAR StoreServ 10400	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1			
		Single Path	No	-				
		Single Path	No	-				
		Single Path	No	-				
3PAR StoreServ 10800	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	FC	vSphere (RDM)	YES	No Multipath ARK	v9.2 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.2 - v9.3.1			
		Single Path	No	-				
		Single Path	No	-				
		Single Path	No	-				
MSA: MSA2050 MSA2052	FC	vSphere (RDM)	YES	No Multipath ARK	v9.1 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	FC	vSphere (RDM)	YES	No Multipath ARK	v9.1 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.1 - v9.3.1			
		Single Path	No	-				
		Single Path	No	-				
		Single Path	No	-				
MSA: MSA2042	FC	vSphere (RDM)	YES	No Multipath ARK	v9.1 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1			
		Single Path	No	-				
		Single Path	No	-				
		Single Path	No	-				
MSA: MSA1040 MSA2040	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1			
		Single Path	No	-				
		Single Path	No	-				
		Single Path	No	-				
StoreVirtual (LeftHand) Series LeftHand OS version 12.6	FC	vSphere (RDM)	No	-	-			
		Multi Path (DMMP)	YES	DMMP ARK				
	iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.1 - v9.3.1			
		Single Path	No	-				
	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
	iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1			
		Single Path	No	-				
	HP P9500	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
		FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (HCLM)	YES	HELH ARK			
iSCSI		Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1			
		Single Path	YES	No Multipath ARK				
X77 Storage System		FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (HCLM)	YES	HELH ARK			
			Multi Path (DMMP)	YES	DMMP ARK			
			Single Path	YES	No Multipath ARK			
		FC	vSphere (RDM)	No	-	-		
			Multi Path (DMMP)	YES	DMMP ARK			
	Single Path		No	-				
	Single Path		No	-				
	IBM SAM Volume Controller * * IBM TotalStorage Proven	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1		
			Multi Path (DMMP)	YES	DMMP ARK			
		iSCSI	Multi Path (DMMP)	No	-	-		
			Single Path	No	-			
FC		vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
iSCSI		Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1			
		Single Path	No	-				
IBM Storwize V7000		iSCSI	Multi Path (DMMP)	YES	DMMP ARK	v9.0 - v9.3.1		
			Single Path	No	-			
			Single Path	No	-			
			Single Path	No	-			
	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	SAS	vSphere (RDM)	No	-	-			
		Multi Path (DMMP)	No	-				
		Single Path	No	-				
		Single Path	No	-				
IBM Storwize V3700	FC	vSphere (RDM)	YES	No Multipath ARK	v9.0 - v9.3.1			
		Multi Path (DMMP)	YES	DMMP ARK				
		Single Path	No	-				
		Single Path	No	-				
	iSCSI	Multi Path (DMMP)	No	-	-			
		Single Path	No					