

### Overview

## HPE Recovery Manager Central

HPE Recovery Manager Central Software (RMC) delivers unified data protection for your business critical application data stored on HPE Storage arrays. RMC addresses a range of RPO/RTO objectives with flexible recovery options using snapshots, backups and replicated data copies to meet a wide variety of DR requirements.

RMC primarily automates snapshot-based protection on HPE 3PAR StoreServ storage arrays, HPE HC 250 Hyper Converged system for VMware vSphere and HPE StoreVirtual VSA without any impact on the application server. RMC leverages 3PAR Virtual Copy Software to create snapshots on the 3PAR storage array. Virtual Copy Software is a reservation-less, non-duplicative, copy-on-write product that consumes capacity only for changed data, in fine-grained increments, without ever duplicating changed data within a snapshot tree. The Hyper Converged 250 System, which comes with HPE StoreVirtual data services, also uses reservation-less and thin-provisioned snapshots, which consumes storage space only for the data blocks written to the snapshot.

RMC also supports fast, efficient backups directly from these primary storage platforms to HPE StoreOnce Backup systems using Express Protect technology. RMC with Express Protect combines the simplicity and performance of array-based snapshots with the reliability and cost-effective retention of deduplicated backups to deliver a true, integrated data protection solution that goes beyond the storage array itself. Although RMC can protect any application data on any supported storage platform using crash-consistent snapshots and backups, application-integration is facilitated for VMware vSphere and Microsoft applications running on a VMware VM (all supported storage platforms), as well as for MS SQL, MS Exchange, Oracle and SAP HANA databases (3PAR only) for ensuring the snapshots and backups are application-consistent. However other applications can also be integrated through customized scripting by leveraging the RMC REST API SDK to automate the management of snapshots and backups. Administrators can be assured of recovery from application-consistent snapshots on the primary storage system as well as application-consistent backups on the StoreOnce system.

“Express Protect” Backups to StoreOnce using RMC and StoreOnce Catalyst technology are fast and efficient compared to traditional methods because RMC intelligently detects changed blocks between successive snapshots and only those blocks are moved over the wire, thus conserving bandwidth. With average deduplication ratios of 20:1, StoreOnce ensures efficient use of backup storage space. Recovery is also fast and reliable, because all backups stored on StoreOnce are “synthetic fulls” or self-contained volumes and available for recovery instantly – back to the original or different storage array, even if the original base volume is lost. Furthermore, keeping your backups on a separate platform such as StoreOnce ensures fault isolation from data loss risks such as ransomware attacks that array-based replication technologies are susceptible to. For additional disaster recovery needs, RMC also supports StoreOnce Catalyst Copy for copying Express Protect Backups to one or more remote StoreOnce appliances, including copying to StoreOnce Cloud Bank Storage on a public cloud tier such as Amazon S3 or Microsoft Azure.

In addition, RMC also enables Peer Copy, which delivers bi-directional data copy between HPE 3PAR StoreServ storage arrays and HPE StoreVirtual VSA. Leveraging 3PAR Virtual Copy, the StoreVirtual VSA snapshot technology and using the same underlying technology as Express Protect, the Peer Copy feature moves only the changed blocks over the wire making this asynchronous replication quite bandwidth-efficient. Volume-level copy granularity is provided by ad-hoc administrator action or a configurable policy. Peer Copy is currently based on crash-consistent snapshots with no application integration. The copy on the StoreVirtual VSA can be used for test/dev of applications before moving to the production 3PAR storage or the StoreVirtual VSA can be treated as a lower-cost replication tier. Peer Copy can also be used for ROBO data protection when it is imperative to meet strict RPO/RTO objectives, but backing up the snapshot data to StoreOnce using Express Protect provides a second line of defense, protecting application data against file loss or application corruption beyond the oldest snapshot or the latest replicated copy.

Fundamentally, by offering the ability to manage snapshots, backups and replicated data copies from a single GUI, RMC allows HPE Storage customers to meet their copy data management challenges more easily and meet the varied recovery SLAs that their business demands.

### Management Plane:

VMware administrators can access all of this functionality from within the familiar VMware vCenter management console. Oracle, SAP HANA, MS Exchange and MS SQL Server administrators can access all of this functionality from the user-friendly RMC GUI,

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which can also be launched directly from a link within the MS SQL Studio management interface.

### Installation:

RMC is very easy to deploy and set up using just a few simple clicks. The RMC installer can be installed on a Microsoft Windows server with a connection to a VMware ESXi host, supported primary storage arrays and StoreOnce systems. This one-time installer wizard guides the user to go through a set of pre-flight checks to evaluate environmental readiness and helps the user deploy RMC as a VMware Virtual Appliance. RMC can also be installed on a Hyper-V VM (connected over iSCSI or vFC\*). In case the user does not have a StoreOnce appliance at the time of installation, the RMC installer also offers the option to install a free 1TB StoreOnce VSA for evaluation purposes to experience the benefits of Express Protect, first-hand. This trial VSA can then be upgraded to a fully working version by purchasing permanent licenses, if desired. For licensing and download instructions, please see relevant sections elsewhere in this document.

### NOTE:

\* For RMC deployment on Hyper-V VMs, the Windows Hyper-V host server must have the following security updates - KB4015217 for Windows Server 2016 and KB4015550 for Windows Server 2012 R2 - or later roll-ups installed.

## HPE Recovery Manager Central – Application plug-ins

### Overview

HPE Recovery Manager Central provides integration with specific hypervisor/application environments through the following integrated plug-ins.

**HPE Recovery Manager Central for VMware (RMC-V):** allows VMware administrators to create hundreds of application consistent snapshots and initiate rapid online recovery of VMs directly from within the VMware vCenter™ Server virtualization management console using a few simple clicks. Individual VMs or files within a VM can be recovered granularly from within a snapshot. Additionally, using the StoreOnce RMC Express Protect feature, customers can also backup to and recover from StoreOnce directly. Element Recovery Technology (ERT) enables granular recovery of an individual VM or files within a VM from an Express Protect backup on StoreOnce, thus providing the same recovery experience from both snapshots and backups, depending on Recovery Point Objectives (RPO) / Recovery Time Objectives (RTO). Furthermore, backups can be copied to a remote StoreOnce appliance on-prem or to StoreOnce Cloud Bank Storage on a public cloud tier such as Amazon S3 or Microsoft Azure. Supported on 3PAR StoreServ storage arrays, StoreVirtual VSA and HC 250 for VMware vSphere.

**HPE Recovery Manager Central for SQL (RMC-S):** allows SQL database administrators to create, schedule and manage SQL-application consistent snapshots on a 3PAR array. Recovery of SQL databases and instances is simple, fast and efficient. Additionally, the RMC Express Protect feature enables direct backup of SQL data volumes from HPE 3PAR to StoreOnce. The backups are self-contained volumes that can be restored back to the original or different 3PAR StoreServ array in the event of a disaster.

**HPE Recovery Manager Central for MS Exchange (RMC-E):** allows Exchange administrators to create, schedule and manage Exchange-application consistent snapshots on a 3PAR array. Recovery of Exchange databases is simple, fast and efficient. Additionally, the RMC Express Protect feature enables direct backup of Exchange data volumes from HPE 3PAR to StoreOnce. The backups are self-contained volumes that can be restored back to the original or different 3PAR StoreServ array in the event of a disaster.

**HPE Recovery Manager Central for Oracle (RMC-O):** allows Oracle database administrators to create, schedule and manage Oracle-application consistent snapshots on a 3PAR array. Recovery of Oracle single-instance databases and Real Application Clusters (RAC) configurations are simple, fast and efficient. Additionally, the RMC Express Protect feature enables direct backup of Oracle data volumes from HPE 3PAR to StoreOnce. The backups are self-contained volumes that can be restored back to the original or different 3PAR StoreServ array in the event of a disaster.

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**HPE Recovery Manager Central for SAP HANA (RMC-SH):** allows SAP HANA database administrators to create, schedule and manage SAP HANA-application consistent snapshots on a 3PAR array. Recovery of SAP HANA databases is simple, fast and efficient. Additionally, the RMC Express Protect feature enables direct backup of SAP data volumes from HPE 3PAR to StoreOnce. The backups are self-contained volumes that can be restored back to the original or different 3PAR StoreServ array in the event of a disaster.

## What's New

- Support for protection of on-prem MS Exchange Servers through application-consistent snapshots on the 3PAR array and Express Protect Backups to StoreOnce appliances
- Extend data protection from the data center to the cloud: support for copying backups to StoreOnce Cloud Bank Storage on a public cloud tier such as Amazon S3 or Microsoft Azure
- RMC-SH: Support for Multi-tenant Database Containers (MDC) configurations introduced in SAP HANA 2.0 SPS 01

## Features and Benefits

### Features and Benefits

Key features and benefits of Recovery Manager Central Software

#### **Copy Data Management from a central point of control**

HPE Recovery Manager Central (RMC) serves as the single integration and control point for unified data protection of multiple HPE Storage platforms and various applications. Leveraging primary storage Snapshot technology and StoreOnce Catalyst Backup for converged data protection, RMC combines the simplicity and performance of snapshots with the reliability and storage efficiency of deduplicated backups. Peer Copy complements the backup capabilities by offering the flexibility of recovering data from a replicated copy for meeting more stringent RPO/RTO requirements than possible through the backup tier. By managing snapshots, backups and replicated data copies through a single GUI, RMC helps customers manage copy data management challenges more easily.

#### **Simple, automated, non-disruptive**

Protection of VMware virtual machines and Oracle, MS SQL, MS Exchange, SAP HANA databases is simplified, completely automated through pre-set schedules and is non-disruptive to the application server.

#### **Reduced cost, less complexity**

A key feature of RMC is the Express Protect capability that facilitates direct backup from primary storage to backup storage completely removing the application server from the data path. This feature practically eliminates backup impact on the application server, providing seamless, non-intrusive data protection at reduced cost and complexity than traditional methods. RMC Express Protect Backups are up to 23x faster than traditional ISV-based backups. Restores are up to 7x faster. For supported applications, Express Restore could potentially recreate deleted snapshots on 3PAR from equivalent Express Protect Backups on StoreOnce – up to 15X faster than ISVs.

#### **Faster, more efficient backup and recovery**

RMC uses an array-based approach to create reservation-less, highly space-efficient snapshots without the use of separate agents installed on individual virtual machines. Synthetic full backups are generated in-line using the prior set of objects and leveraging Snapdiff technology to identify and send only the incrementally changed blocks to StoreOnce resulting in a fast, efficient, “low-bandwidth” backup.

#### **Less risk, more agility**

Recover to any point in time. Scalable, non-duplicative snapshots allow administrators a greater number of backups for a frequent extended history of recovery points, giving flexibility when committing to a given RPO. Each StoreOnce backup is a self-contained volume which can be used to restore to the original or a different primary storage array, even if the original base volume is completely lost. This level of data protection cannot be obtained using snapshots alone. Furthermore, backups can be copied to a remote StoreOnce appliance off-site or on the cloud using StoreOnce Cloud Bank Storage.

#### **Application flexibility**

RMC also provides a programmable interface via a REST API SDK (<http://www.hpe.com/storage/rmc-sdk>) for scripting purposes, which can be used to integrate the snapshot, *Peer Copy* and *Express Protect* backup management capabilities on supported platforms with your business applications. As long as the users know how to script quiescence for their particular application, they can use those scripts along with RMC API-based scripts to ensure snapshots and backups are application-consistent. This can be done for any application, for which there is a way to quiesce the application or put it in backup mode, before triggering the RMC APIs to create the snapshots and initiate Express Protect Backups. Additionally, the RMC REST API SDK also serves as a single integration point for ISVs such as Data Protector for facilitating snapshot and backup management on supported HPE primary storage platforms and StoreOnce systems. This ensures that customers can continue using

## Features and Benefits

their existing backup applications with all the rich feature sets and cataloguing capabilities they provide, while leveraging the unique features of RMC such as Express Protect for faster backups to StoreOnce.

## Technical Specifications

### Recovery Manager Central: Technical Specifications

Technical Specifications	Sample Configurations			
Minimum vCPU (@ 2.2GHz) for maximum performance	2	4	8	16
Minimum vRAM for maximum performance	8 GB	16 GB	32 GB	64 GB
<b>Supported Operations</b>				
Snapshot / Virtual Copy	✓	✓	✓	✓
Express Protect	✗	✓	✓	✓
Peer Copy	✗	✓	✓	✓
<b>Supported Devices</b>				
Supported 3PAR StoreServ Storage Arrays	8000 series, 9000 series, 20000 series, 7000 series, 10000 series, F-Class#, T-Class#			
Supported 3PAR Inform OS versions	3.2.1 MU5 and above			
Max 3PAR StorServ Storage arrays	2	4	8	16
Supported StoreOnce Backup systems	All physical StoreOnce appliances and StoreOnce VSA running a supported StoreOnce software			
Supported StoreOnce software versions	3.16.0, 3.15.1, 3.13.3 & above			
<b>Snapshots support</b>				
No of Snapshots per minute	96	160	160	160
<b>Backing up of Recovery Sets</b>				
Max Recovery Sets Backed Up In Parallel	N/A	8	16	32
Max Volumes Per Recovery Set	32	32	32	32
Max Volume Size	N/A	16 TB*	16 TB*	16 TB*
Max Streams Per Volume	N/A	16	16	16
<b>Backup / Restore Performance</b>				
Max synthetic full speed (TB/hr)	N/A	20	40	80
Max restore speed (TB/hr)	N/A	4	5	5
Max Streams	N/A	64	128	256
<b>StoreServ Remote Copy</b>				
Replication Modes supported for remote snapshots	Synchronous , Asynchronous, Periodic and Synchronous Long Distance (SLD)			
Remote Copy configurations supported	1-1 Unidirectional and Bi-directional			
<b>NOTE:</b>				
# Current customers of F-class & T-class 3PAR StoreServ storage arrays (running 3PAR OS 3.1.2 MU5 and above) using 3PAR Recovery Manager software products will be able to upgrade to RMC and retain their snapshot management functionality, but Express Protect functionality is not supported.				
* HPE 3PAR OS 3.2.1 MU3 or later is required for supporting volumes greater than 8TB in size.				
Please refer to SPOCK ( <a href="https://www.hpe.com/Storage/Spock/">https://www.hpe.com/Storage/Spock/</a> ) for the latest RMC compatibility matrix for supported arrays, OS, database versions, etc.				

## Technical Specifications

### Resource pre-requisites for RMC-S Interface Server

RMC-S requires a x64-based computer to be designated as an “Interface Server” with the following minimum requirements:

CPU	2 core @2 GHz
RAM	2 GB
Disk space	50 GB

### SKUs at-a-glance

HPE StoreOnce Recovery Manager Central Media	D4U76A
HPE Recovery Manager Central LTU / E-LTU	D4U75A/D4U75AAE
HPE Recovery Manager Central Suite for 3PAR StoreServ 72xx	L9Q82A/L9Q82AAE
HPE Recovery Manager Central Suite for 3PAR StoreServ 74xx	L9Q83A/L9Q83AAE
HPE Recovery Manager Central Suite for 3PAR StoreServ 10xxx	L9Q84A/L9Q84AAE

## Purchasing Information

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SKU Name	SKU number	Description	Includes
HPE Recovery Manager Central Media	D4U76A	DVD containing RMC software	<ul style="list-style-type: none"> <li>DVD containing RMC software</li> </ul>
HPE Recovery Manager Central LTU	D4U75A	This LTU allows crash-consistent snapshots (or application-consistent snapshots if scripted separately and used alongside the RMC APIs) of any application data on HPE 3PAR StoreServ 7000/10000 models.	<ul style="list-style-type: none"> <li>HPE Recovery Manager Central LTU</li> <li>Paper delivery of license key entitlement</li> </ul>
HPE Recovery Manager Central E-LTU	D4U75AAE	This E-LTU allows crash-consistent snapshots (or application-consistent snapshots if scripted separately and used alongside the RMC APIs) of any application data on HPE 3PAR StoreServ 7000/10000 models.	<ul style="list-style-type: none"> <li>HPE Recovery Manager Central E-LTU</li> <li>Electronic (email) delivery of license key entitlement</li> </ul>
HPE Recovery Manager Central Suite for 3PAR StoreServ 72xx	L9Q82A	This LTU is an array-specific, application-specific license for taking application-consistent snapshots of all supported applications on HPE 3PAR StoreServ 7200	<ul style="list-style-type: none"> <li>HPE Recovery Manager Central Suite for 3PAR StoreServ 72xx LTU</li> <li>Paper delivery of license key entitlement</li> </ul>
HPE Recovery Manager Central Suite for 3PAR StoreServ 72xx	L9Q82AAE	This E-LTU is an array-specific, application-specific license for taking application-consistent snapshots of all supported applications on HPE 3PAR StoreServ 7200	<ul style="list-style-type: none"> <li>HPE Recovery Manager Central Suite for 3PAR StoreServ 72xx E-LTU</li> <li>Link to download from Software Depot</li> <li>Electronic (email) delivery of license key entitlement.</li> </ul>
HPE Recovery Manager Central Suite for 3PAR StoreServ 74xx	L9Q83A	This LTU is an array-specific, application-specific license for taking application-consistent snapshots of all supported applications on HPE 3PAR StoreServ 7400	<ul style="list-style-type: none"> <li>HPE Recovery Manager Central Suite for 3PAR StoreServ 74xx LTU</li> <li>Paper delivery of license key entitlement</li> </ul>
HPE Recovery Manager Central Suite for 3PAR StoreServ 74xx	L9Q83AAE	This E-LTU is an array-specific, application-specific license for taking application-consistent snapshots of all supported applications on HPE 3PAR StoreServ 7400	<ul style="list-style-type: none"> <li>HPE Recovery Manager Central Suite for 3PAR StoreServ 74xx E-LTU</li> <li>Link to download from Software Depot</li> <li>Electronic (email) delivery of license key entitlement.</li> </ul>
HPE Recovery Manager Central Suite for 3PAR StoreServ 10xxx	L9Q84A	This LTU is an array-specific, application-specific license for taking application-consistent snapshots of all supported applications on HPE 3PAR StoreServ 10000	<ul style="list-style-type: none"> <li>HPE Recovery Manager Central Suite for 3PAR StoreServ 10xxx LTU</li> <li>Paper delivery of license key entitlement</li> </ul>
HPE Recovery Manager Central Suite for 3PAR StoreServ 10xxx	L9Q84AAE	This E-LTU is an array-specific, application-specific license for taking application-consistent snapshots of all supported applications on HPE 3PAR	<ul style="list-style-type: none"> <li>HPE Recovery Manager Central Suite for 3PAR StoreServ 10xxx E-LTU</li> <li>Link to download from Software Depot</li> </ul>

## Purchasing Information

StoreServ 10000

- Electronic (email) delivery of license key entitlement

**NOTE:** None of the license SKUs include RMC media which is available as a separate SKU. (D4U76A: HPE Recovery Manager Central Media)

## Purchasing Information

### Licensing **NOTES:**

#### Snapshot Management on HPE 3PAR StoreServ Storage arrays

- All requisite RMC licenses are included by default as part of the 3PAR all-inclusive single-system software license suite, for the 3PAR 8000 and 20000 series of arrays. (The 3PAR Virtual Copy software license is a pre-requisite for RMC to work, but the Virtual Copy license is also part of the all-inclusive suite).
- In other words, the RMC-based snapshot management functionality is available for no additional cost to all 3PAR 8000 and 20000 customers, without any additional licensing requirements.
- If RMC is used to manage snapshots of remote copy volume groups across two 3PAR StoreServ arrays under a remote copy replication relationship, then a 3PAR Remote Copy software license is a pre-requisite, which is part of the 3PAR all-inclusive multi-system software license suite.
- The 3PAR all-inclusive suites are not available for the legacy 3PAR 7000 and 10000 series of arrays. For customers using these older array models, the RMC snapshot management functionality can be licensed by purchasing a corresponding RMC Suite SKU (Please see previous section for SKU details). These Suite SKUs enable all application plug-ins including RMC-V, RMC-S, RMC-O as well as RMC-SH and are licensed per array frame regardless of amount of data protected.

**NOTE:** A HPE 3PAR Virtual Lock license is not mandatory, but can be used optionally for enforcing data retention. During the user-specified retention period, volumes and copies can be read but are protected against deletion, even by an administrator with the highest level user privileges.

- Existing customers of HPE 3PAR Recovery Manager for VMware (RM-V) do not need any additional license to upgrade to RMC. The same RM-V license will continue to work with RMC-V and any pending tenure of support services will automatically transition over to the upgraded software.
- Existing customers of HPE 3PAR Recovery Manager for SQL (RM-S) software do not need any additional license to upgrade to RMC. The same RM-S license will continue to work with RMC-S and any pending tenure of support services will automatically transition over to the upgraded software.
- Existing customers of HPE 3PAR Recovery Manager for Oracle (RM-O) software do not need any additional license to upgrade to RMC. The same RM-O license will continue to work with RMC-O and any pending tenure of Support services will automatically transition over to the upgraded software.

#### Snapshot Management on HPE Hyper Converged 250 System for VMware vSphere

- Customers ordering HPE Hyper Converged 250 System for VMware vSphere on or after 30 August 2016 are already licensed for RMC.
- All requisite licenses to enable the RMC-V functionality to create, schedule, manage crash-consistent or application-consistent snapshots on the StoreVirtual data services running on the HC 250 System for VMware vSphere are included in the HC250 product bundle itself. No separate license is required.
- Otherwise, please contact HPE Global Licensing ([MyEnterpriseLicense.hpe.com](http://MyEnterpriseLicense.hpe.com)) to relicense your HC 250 system to include the RMC license.
- Please refer to HC 250 documentation for more details on licensing requirements.

#### Snapshot Management on HPE StoreVirtual VSA

- Customers ordering HPE StoreVirtual VSA on or after 27 March 2017 are already licensed for RMC.
- All requisite licenses to enable the RMC-V functionality to create, schedule, manage crash-consistent or application-consistent snapshots on the StoreVirtual VSA are enabled by default. No separate license is required.
- Otherwise, please contact HPE Global Licensing ([MyEnterpriseLicense.hpe.com](http://MyEnterpriseLicense.hpe.com)) to relicense your StoreVirtual VSA to include the RMC license.
- Please refer to StoreVirtual VSA documentation for more details.

#### Backup Management on HPE StoreOnce Systems (Express Protect)

- To unlock the Express Protect feature to carry out direct backups from supported storage arrays to HPE StoreOnce Backup systems using RMC, the only license required is a HPE StoreOnce Catalyst license.

## Purchasing Information

- This license needs to be installed on the HPE StoreOnce Backup system. One instance of this license is required per HPE StoreOnce appliance.  
Please refer to the [HPE StoreOnce QuickSpecs](#) for obtaining a StoreOnce Catalyst license

### Replication Management on HPE 3PAR StoreServ / HPE StoreVirtual VSA (Peer Copy)

- There are no separate licenses required to enable the Peer Copy feature in RMC as long as the storage systems are already enabled with a license for RMC (either through the array's all-inclusive license or through the RMC suite)
- Peer Copy, however, does require the 3PAR Remote Copy software license and the StoreVirtual Remote Copy license to be enabled as a pre-requisite on the corresponding array platforms. The 3PAR Remote Copy license is available as part of the 3PAR all-inclusive multi-system software license suite on the 3PAR 8000 and 20000 series. The StoreVirtual Remote Copy license is also included with the product as part of the all-inclusive license.

### Instructions for Electronic Download

- Check for compatibility of the RMC software with your current environment from SPOCK (Single Point of Connectivity Knowledge for HPE Storage Products) at <https://www.hpe.com/Storage/Spock/>
- Go to <http://www.hpe.com/downloads/software> and login with your HPE Passport User ID and Password.
- A valid HPE software support contract is required in order to access the RMC software from this location.
- If you already have an appropriate Service Agreement ID (SAID), please enter it in the box "Directly enter an SAID" and click on "View available products."
- In the next page, navigate as follows to access the RMC software for download: HPE Storage → Storage Software → RMC.
- SAIDs associated with purchase of the following SKUs are considered valid for downloading RMC:
  - HPE 3PAR StoreServ 8000/20000 base SKUs purchased on or after 13 Feb 2017 (with RMC licenses included as part of 3PAR all-inclusive single-system licensing)
  - HPE HC 250 SKU bundle purchased on or after 30 Aug 2016 (with RMC licenses included) or re-licensed for RMC thereafter
  - HPE StoreVirtual VSA SKUs purchased on or after 27 Mar 2017 (with RMC licenses included) or re-licensed for RMC thereafter
  - Any RMC SKUs purchased at any time
  - SKUs purchased for:
    - 3PAR Application Suite for VMware (3PAR Recovery Manager for VMware)
    - 3PAR Application Suite for MS SQL (3PAR Recovery Manager for MS SQL)
    - 3PAR Application Suite for Oracle (3PAR Recovery Manager for Oracle)
- If you have a valid SAID, but you are still unable to access the RMC software, make sure you have linked the SAID to your HPE Passport profile.
- If you do not have a valid SAID, you will be unable to access the RMC software unless you purchase a new support contract with HPE.

### Obtaining RMC software for Evaluation Purposes

- If your primary storage system is not already licensed for RMC, please contact a HPE representative and request a Not-for-Resale (NFR) license for a RMC Suite license.
- The NFR process provides you a temporary RMC license (valid for 180 days) as well as access to the RMC software.

## Service and Support

**Deploy and Integrate** **Implement HPE Recovery Manager Central correctly**—right from the start—so you can count on reduced risk and accelerated deployment, while implementing a best-practice configuration from day one. Then move on to proactively leverage products, tools, and technology to avoid problems and optimize performance. In this way, you get the most out of your HPE Recovery Manager Central investment, as you keep your staff certified through project-based or residency services.

### Service and Support **Services to accelerate time to results**

HPE Pointnext brings you a rich portfolio of Advisory, Professional services and Operational support services designed to add value to our core storage products and solutions. We have the know-how and experience to put storage technology to work for you. We work closely with you as your strategic partner, leveraging our full services portfolio to make sure that everything works to optimize your enterprise.

Choose from services aligned to our storage product offerings and lifecycle. From mission-critical onsite services to innovative web-based remote support, you choose the precise level of attention and support your business demands.

**HPE Recovery Manager Central (RMC) Software Installation and Startup Service**—Provides deployment of HPE RMC software with features designed to help enable proper installation in the customer's storage environment and increase the benefit from the storage investment.

<http://h20195.www2.hpe.com/v2/GetPDF.aspx/4aa5-6254ENW.pdf>

Description	Service SKU
HPE RMC Startup SVC	HA124A1#5WD (U7PE6E)
HPE RMC-VMware Startup SVC	HA124A1#5WE (U7PE7E)
HPE RMC-SQL for 3PAR Startup SVC	HA124A1#5ZB (U7VG3E)
HPE RMC-Oracle for 3PAR Startup SVC	HA124A1#5ZG (U7VG6E)
HPE RMC-SAPHANA singleN for 3PAR Startup SVC	HA124A1#5F0 (H2UT0E)
HPE RMC-SAPHANA multiN for 3PAR Startup SVC	HA124A1#5FN (H6KY5E)
HPE-RMC-Exchange for 3PAR Startup SVC	HA124A1#5SD (U7VG2E)

HPE Recovery Manager Central (RMC) Solution for SAP HANA on 3PAR Service is designed to assist in achieving a higher speed and lower cost backup in comparison to traditional backup applications. <https://www.hpe.com/h20195/v2/getpdf.aspx/a00016443enw.pdf>

Description	Service SKU
HPE RMC Solution for SAP HANA on 3PAR Level 1 Service	H5UR7A1
HPE RMC Solution for SAP HANA on 3PAR Level 2 Service	H7RF6A1
HPE RMC Solution for SAP HANA on 3PAR Level 3 Service	H7RF7A1
HPE RMC Solution for SAP HANA on 3PAR Custom SoW Service	H1WV1A1

**Operate and support** **Choose the right support to maximize uptime, free up your resources, and achieve improved**

## Service and Support

**value-as you get the most out of the existing IT assets while accelerating time-to-revenue.**

### **HPE Foundation Care**

System-level IT hardware and software support delivers flexible coverage window and response time, for more choice and simplicity. <http://h20195.www2.hpe.com/v2/GetPDF.aspx/4AA4-8876ENW.pdf>

### **HPE Proactive Care**

Combined reactive and proactive services provide easy-to-purchase, cost-efficient system-level support coupled with personalized expert advice and products connected to Hewlett Packard Enterprise to help prevent problems and reduce downtime. <http://h20195.www2.hpe.com/v2/GetPDF.aspx/4AA3-8855ENW.pdf>

**HPE Proactive Care Advanced** builds and incorporates on Proactive Care and also gives customers personalized technical and operational advice from an Assigned, local Account Support Manager for personalized technical collaboration, flexible access to specialist skills to help optimize business critical IT, and Enhanced Critical Incident Management to help so the business is not affected if there is a system or device outage.

<http://h20195.www2.hpe.com/v2/GetPDF.aspx/4AA5-3259ENW.pdf>

### **HPE Datacenter Care**

Get the support you need to deploy, operate, and evolve your data center environment to be hybrid-cloud ready with single-point-of-accountability for Hewlett Packard Enterprise and others' product.

<http://h20195.www2.hpe.com/v2/GetPDF.aspx/4AA4-0459ENW.pdf>

**HPE Education Services** - Comprehensive training for new, as well as experienced, storage administrators designed to expand your skills and keep you up to speed with the latest storage and virtualization technology from HPE Storage. <https://www.hpe.com/us/en/services/it-education-training> **Get connected and get back to business** – HPE Storage Technology Services provide the path to get your HPE Storage solutions and your business connected to Hewlett Packard Enterprise. Once connected, our experts are able to scan your system and run health checks, then use that data to create personalized reports and recommendations for actions to take to prevent problems and downtime.

**For more information** <https://www.hpe.com/us/en/services/it-support.html>

To learn more on HPE Storage Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner

**HPE Pointnext Support Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:**

- Services for customers purchasing from Hewlett Packard Enterprise or an enterprise reseller are quoted using Hewlett Packard Enterprise order configuration tools.
- Customers purchasing from a commercial reseller can find HPE Pointnext operational services at: <https://findapartner.hpe.com/>

## **Parts and Materials**

Hewlett Packard Enterprise will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical

## Service and Support

product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

## Summary of Changes

Date	Version History	Action	Description of Change
05-Feb-2018	From Version 16 to 17	Changed	Overview, Features and Benefits, and Service and Support were revised.
23-Oct-2017	From Version 15 to 16	Changed	Care Pack naming and Service and Support- Parts and Materials updated.
25-Sept-2017	From version 14 to 15	Changed	Changes made to the Standard Features Section
11-Jul-2017	From Version 13 to 14	Changed	Changes were made throughout the QuickSpecs
05-Jun-2017	From Version 12 to 13	Changed	Changes were made throughout the QuickSpecs
27-Mar-2017	From Version 11 to 12	Changed	Changes were made throughout the QuickSpecs
15-Aug-2016	From Version 10 to 11	Changed	Changes made to reflect new features and SKUs in RMC 3.0
01-Dec-2015	From Version 9 to 10	Changed	Changes made to reflect new features in RMC 2.0 and an updated service and support section
18-Sept-2015	From Version 8 to 9	Changed	Changed made to the Purchasing Information, Technical Specifications and What 's New Sections.
21-Aug-2015	From Version 7 to 8	Changed	Changes made to the Technical Specifications Sections.
10-Jul-2015	From Version 6 to 7	Changed	Changes made to the Overview, Features and Benefits, Technical Specifications and Purchasing Information's Sections.
16-Apr-2015	From Version 5 to 6	Changed	3 new SKUs added
20-Mar-2015	From Version 4 to 5	Changed	Changes made to the Purchasing Information section.
30-Jan-2015	From Version 3 to 4	Changed	Changes on the Technical Specifications and Features and benefits Sections
12-Dec-2014	From Version 2 to 3	Changed	Changes were made throughout the QuickSpecs
5-Dec-2014	From Version 1 to 2	Changed	Changed all references to StoreOnce Express Backup for StoreOnce Express Protect.



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For drives, 1 GB = 1 billion bytes. Actual formatted capacity is less  
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