

Zero Data Loss Recovery Appliance

Site Checklists

Release 12.2

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Complete the following site summary to provide basic customer contact information and to evaluate the overall readiness of the site for installation.

Description	Site Information
Is the site prepared for installation? A: Pass. All complete and ready for installation B: Conditional pass. Not ready, but all open issues are scheduled to be fixed F: Fail. Not ready, and some open issues are not scheduled to be fixed	
Customer signature and date (optional)	
Customer name	
Customer address	
Customer contact Name: Title: Email: Telephone:	
Oracle installation service request number (if known)	
Installation type: How many racks? Is this a new installation or is it an extension to an existing installation?	
Open issues: What did not pass? When will the issue be resolved?	
Comments:	

Complete the following checklists to ensure that the site is prepared for the installation of Zero Data Loss Recovery Appliance (Recovery Appliance):

- System Components Checklist
- Data Center Room Checklist
- Data Center Environment Checklist
- Access Route Checklist
- Facility Power Checklist
- Safety Checklist
- Logistics Checklist
- Network Configuration Checklist
- Auto Service Request Checklist
- Replication and Tape Backup Checklists
- Reracking Checklists

System Components Checklist

Complete the following checklist to ensure that the system's component and multirack issues have been addressed. If you will use Oracle Secure Backup for tape backups, note that Recovery Appliance installation ends at the fiber card; it does not extend to the tape system.

For information about multirack cabling, see *Zero Data Loss Recovery Appliance Owner's Guide*.

System Components Checklist Items	Yes	No	NA	Comment
How many Recovery Appliance racks will be installed at the site?	—	—	—	
Is the rack an extension of an existing Recovery Appliance system, and not a new installation? For an extension to an existing system, see <i>Zero Data Loss Recovery Appliance Owner's Guide</i> for multirack cabling information.				
If the new rack will connect to other Recovery Appliance racks, then did you order the Sun Datacenter InfiniBand Switch 36 spine switches and cables?				
If more than three racks will be installed, then did you order the cable expansion kit?				
Did you order the multirack cabling service?				
Are all Recovery Appliance racks adjacent to each other?				

System Components Checklist Items	Yes	No	NA	Comment
<p>If the connecting racks are not adjacent, then did you do the following tasks:</p> <ul style="list-style-type: none"> ▪ Order longer InfiniBand cables from an approved third-party provider? ▪ Ask Oracle Support Services to provide and schedule the custom multirack cabling service with the installation? 				
<p>Will you replace the Ethernet switch? If yes, then did you arrange for the replacement switch installation?</p>				
<p>Did you order enough 10 GbE cables to connect the local protected database systems to Recovery Appliance?</p> <p>Use two cables for each database system for redundancy.</p>				
<p>If your data center does not have a 10 GbE infrastructure, then have you ordered an external switch that supports both 10 GbE (or 40 GbE) and 1 GbE?</p>				
<p>Will additional equipment be installed in the rack? If yes, then describe the additions.</p> <p>You may install two 1 GbE switches in the top of the rack (U41 and U42).</p>				

Data Center Room Checklist

Complete the following checklist to ensure that the data center room requirements are met for Recovery Appliance.

For information about space and flooring requirements, see *Zero Data Loss Recovery Appliance Owner's Guide*.

Data Center Room Checklist Items	Yes	No	NA	Comment
<p>Have you allocated the Recovery Appliance rack location?</p>				
<p>Is the allocated location vacant and ready for the new equipment?</p>				
<p>Does the floor layout meet the equipment maintenance access requirements?</p>				

Data Center Room Checklist Items	Yes	No	NA	Comment
Is adequate space available for maintenance?				
Have you chosen a cabinet stabilization method?				
Does the data center have a raised floor?				
Does the raised floor satisfy the weight load requirement for the new hardware?				
Do the raised floor tiles provide sufficient cutout space for the power cord plugs to pass through to the subfloor?				
Can the floor tiles be removed without permission to accommodate service?				
Will the new hardware location require any nonstandard cable lengths?				
Is the floor to ceiling height a minimum of 2.9 meters (9.6 feet)?				

Data Center Environment Checklist

Complete the following checklist to ensure that the data center environment requirements are met for the Recovery Appliance.

For information about temperature and humidity requirements, see *Zero Data Loss Recovery Appliance Owner's Guide*.

Data Center Environment Review Items	Yes	No	NA	Comment
Does the computer room air conditioning system meet temperature and humidity requirements?				
Does the installation floor layout satisfy the ventilation requirements?				
Can you position the equipment so that the exhaust air of one rack does not enter the air intake of another rack?				
Is each perforated floor tile rated for air flow at 400 cubic feet per minute or greater?				
Do the data center air conditioners provide sufficient front-to-back airflow?				

Data Center Environment Review Items	Yes	No	NA	Comment
Is the airflow adequate to prevent hot spots?				
Can the data center continuously satisfy environmental requirements?				
Can more perforated floor tiles be obtained if required?				

Access Route Checklist

Complete the following checklist to ensure that the access route requirements are met.

For information about access route requirements, see *Zero Data Loss Recovery Appliance Owner's Guide*.

Access Route Review Items	Yes	No	NA	Comment
Have you checked the access route for clearances of the packaged equipment?				
Do all the doors and entryways conform to the width and height requirements for transportation, including the width of the unpacked unit? All doors and entryways must be at least 87 inches (221 cm) tall for packaged delivery.				
Does the access route provide sufficient space for transporting the packaged devices?				
Have you confirmed that the access route is free of any obstacles that would expose the rack components to shock?				
Are all the surfaces acceptable for rolling the new unpacked and packed equipment?				
Can the path from the receiving location to the designated data center area support the weight of the unpacked equipment?				
Is the path across the raised floor rated for dynamic loads?				
Are you concerned about any ramps or thresholds? If yes, then provide details.				
Have you confirmed that all route incline angles are within the permitted range?				

Access Route Review Items	Yes	No	NA	Comment
Are any stairs or ramps in the moving path for the new hardware?				
If there are stairs, then is a loading elevator accessible for the equipment?				
If an elevator will be used: <ul style="list-style-type: none"> ■ Does the elevator door meets the height requirement of 87 inches (221 cm) for packaged rack delivery? ■ Is the elevator car wide enough for the device to be carried into it? ■ Is the elevator car tall enough for the device to be carried into it? ■ Can the elevator handle the 866 kg (1909 lb) fully-loaded rack weight? 				
If a pallet jack will be used, then have you confirmed that it supports the rack weight?				

Facility Power Checklist

Complete the following checklist to ensure that the facility power requirements are met for Recovery Appliance.

For information about power requirements, see *Zero Data Loss Recovery Appliance Owner's Guide*.

Facility Power Review Items	Yes	No	NA	Comment
Which type of PDU connectors did you order? A: Low-voltage single-phase B: Low-voltage three-phase C: High-voltage single-phase D: High-voltage three-phase	—	—	—	
Are power outlets available for the new equipment at the designated location?				
Are enough power outlets provided within 2 meters of each rack?				
Do the power outlets have appropriate socket receptacles for the PDU connectors that you ordered?				

Facility Power Review Items	Yes	No	NA	Comment
Will optional ground cables be attached to the rack?				
Are the circuit breakers for the equipment suitable in terms of voltage and current-carrying capacities?				
Does the power frequency meet the equipment specifications?				
What are the power requirements of the system, such as operating voltages and electric current levels, of the device and peripherals?	—	—	—	
Do you have the minimum required power sources to support the power load for the new hardware?				
Will system power be delivered from two separate grids?				
Is there an uninterruptible power supply (UPS) to power the equipment?				

Safety Checklist

Complete the following checklist to ensure that the safety requirements are met for Recovery Appliance.

For information about electrical safety, see *Zero Data Loss Recovery Appliance Owner's Guide*.

Safety Review Items	Yes	No	NA	Comment
Is there an emergency power shutoff?				
Is there a fire protection system in the data center room?				
Is the computer room adequately equipped to extinguish a fire?				
Is antistatic flooring installed?				
Is the floor below the raised floor free of obstacles and blockages?				

Logistics Checklist

Complete the following checklist to ensure that the logistics requirements are met for Recovery Appliance.

For information about unpacking and space requirements, see *Zero Data Loss Recovery Appliance Owner's Guide*.

Logistics Review Items	Yes	No	NA	Comment
Do you have contact information for the data center personnel?				
Is there security or access control for the data center?				
Are security background checks or security clearances required for vendor personnel to access the data center? If yes, and you have a recommended agency, then provide the contact information.				
How many days in advance must the background checks be completed?				
Are there any additional security access issues?				
Will sufficient moving personnel be available to install the hardware?				
Is union labor required for any part of the delivery or installation? If yes, then identify which part.				
Does the building have a delivery dock?				
Is there a time constraint on dock access? If yes, then provide a schedule.				
Are there any restrictions on delivery truck length, width, or height?				
Is a tail lift required on the delivery carrier to unload the equipment at the delivery dock?				
Do ground-level deliveries require a truck with a side rail lift?				
Does the delivery carrier require any special equipment, such as non-floor-damaging rollers, transport dollies, pallet jacks, or fork lifts?				

Logistics Review Items	Yes	No	NA	Comment
<p>Are any of the following required to place the equipment in the computer room?</p> <ul style="list-style-type: none"> ■ Stair walkers ■ Lifters ■ Ramps ■ Steel plates ■ Floor covers 				
Does the building have adequate receiving space?				
Is there a delivery, unpacking, and staging area?				
Is the delivery area inside?				
If the delivery is not inside, then is the external site prepared for uncrating?				
Is the unpacking and staging area protected from the elements?				
Are cardboard boxes and other packing materials are allowed in the computer room?				
Is the unpacking area air-conditioned to avoid thermal shock for various hardware components?				
Can installation personnel access the computer room?				
Are laptops, cell phones, and cameras allowed in the data center?				
Are you prepared for uncrating and trash removal?				
Is uncrating of the cabinet and cabinet trash removal required?				

Network Configuration Checklist

Complete the following checklist to ensure that the network configuration requirements are met.

For information about network requirements, see *Zero Data Loss Recovery Appliance Owner's Guide*.

Network Review Items	Yes	No	NA	Comment
Did you fix all conflicts discovered by the <code>checkip.sh</code> script, before connecting Recovery Appliance to the network?				
Did you run the required network cables from your network equipment to the location where the Recovery Appliance rack will be installed?				
Did you label the network cables that will connect to Recovery Appliance rack?				
Did you order the optional 10 GbE SFP+ transceivers and appropriate fiber cables?				
Will the Cisco Ethernet switch have IP routing disabled?				
Did you configure DNS, including forward and reverse resolution, for the following Recovery Appliance IP addresses on the 10GbE ingest network: <ul style="list-style-type: none"> ▪ The static IP addresses for each compute server ▪ The virtual IP addresses for each compute server ▪ The three IP addresses for the SCAN network 				

Auto Service Request Checklist

Complete the following checklist if you are planning to use Auto Service Request with Recovery Appliance.

For information about Auto Service Request, see *Zero Data Loss Recovery Appliance Owner's Guide*.

ASR Review Items	Yes	No	NA	Comment
Do you have a My Oracle Support (MOS) account?				
Do you have your Oracle Support Customer Support Identifier (CSI) number				

ASR Review Items	Yes	No	NA	Comment
Do you have the name and IP address of the server that will host ASR Manager?				
Does the system need a proxy server? If so, what is the host name and IP address of the proxy server?				
Do you have the technical contact information for Auto Service Request? This information includes the first name, last name, and email address of the contact, and the correct shipping address for the Recovery Appliance racks. Note: Verify the serial numbers because multiple systems at multiple sites might be listed under the same Customer Support Identifier.				

Replication and Tape Backup Checklists

Complete the following checklist if you are configuring Recovery Appliance with replication. Replication is optional.

For information about replication, see *Zero Data Loss Recovery Appliance Owner's Guide*.

Replication Checklist Items	Yes	No	NA	Comment
Will you use a dedicated subnet for replication to all downstream Recovery Appliances?				
Will any downstream Recovery Appliance be in a different subnet? If yes, then provide the details of the downstream subnets.				
Are the routes to the downstream Recovery Appliances configured?				
Will replication be set up and tested when the Recovery Appliance is installed?				
If replication will be tested during installation, are the other Recovery Appliances ready to send backups to or receive backups from the new Recovery Appliance?				

Complete the following checklists if you are configuring Recovery Appliance for backup to a tape system. Tape backup is optional.

For information about tape system support, see *Zero Data Loss Recovery Appliance Owner's Guide*.

Tape Backup Checklist Items	Yes	No	NA	Comment
Will you use Oracle Secure Backup as the media manager?				
Did you order the optional fiber channel cards?				
Did you order installation services to connect Recovery Appliance to the tape system?				

If you are using Oracle's StorageTek libraries, then complete the following checklist.

StorageTek Checklist Items	Yes	No	NA	Comment
Can the StorageTek console connect to the tape library?				
Are the tape drives connected and ready to operate?				
If you are using partitioning, did you assign tapes to the partitions?				

If you are using StorageTek Automated Cartridge System Library Software (ACSL) to manage an Oracle tape library, then complete the following checklist.

ACSL Checklist Items	Yes	No	NA	Comment
Can you ping the ACSL server?				
Can you connect to the ACSL server using Secure Shell (SSH)?				
Do you know the password for the acsl user?				
Are all ACSL services online (that is, enabled with the acsl command)?				

If you are using Oracle Key Manager, then complete the following checklist.

Checklist Items	Yes	No	NA	Comment
Are all key management appliances (KMAs) online and replicating?				
Do you have keys that are valid and ready to use?				
Can you ping all drives (agents)?				
Are all agents registered to Oracle Key Manager?				

If you are using a third-party tape library or tape drives and Oracle Secure Backup as the media manager, then complete the following checklist.

Third-Party Tape Checklist Items	Yes	No	NA	Comment
If you will use fiber channel to connect the compute servers to tape devices, are the tape devices online and accessible to the Recovery Appliance compute servers?				
Is the tape device listed in the Oracle Tape Drive and Library Compatibility Matrix? The matrix is at http://www.oracle.com/technetwork/database/database-technologies/secure-backup/learnmore/osb-tapedevicematrix-520156.pdf				
If you will use a Virtual Tape Library (VTL), is the VTL configured as FC-SCSI?				

If you are using a tape Storage Area Network (SAN), then complete the following checklist.

Tape SAN Checklist Items	Yes	No	NA	Comment
Are all the tape devices and robots zoned to each Recovery Appliance compute server?				
Are all usable paths for tape devices zoned to each Recovery Appliance compute server?				
Do you have the appropriate fiber cabling to reach the Recovery Appliance compute servers?				

Reracking Checklists

Reracking is allowed if your site requires a specialized infrastructure.

Note:

- You must order both the Oracle Reracking Service and the Oracle Installation Service.
 - Oracle does not provide support for customer-supplied equipment.
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Complete the following checklists before reracking the Recovery Appliance components.

Reracking Review Items	Yes	No	NA	Comment
Have you ordered the Oracle Reracking Service?				
Have you ordered the Oracle Installation Service?				
Do you have a cart that can carry the weight of the servers, to move the components and associated cabling from the Recovery Appliance rack to your rack?				
Do the target rack dimensions meet the following requirements: <ul style="list-style-type: none"> ■ Height: 42 RU ■ Width: 60 cm (23.6 inches) ■ Depth: 111 cm (43.78 inches) without front or rear doors 				
If the target rack is less than 42 RU: <ul style="list-style-type: none"> ■ Is it at least 30 RU tall? ■ Does it include compatible PDUs? You must provide compatible PDUs to install in a target rack that is less than 42 RU.				
Is the distance between the front and rear mounting planes between the minimum of 610 mm and the maximum 915 mm (24 inches to 36 inches)?				
Is the clearance depth in the front of the front mounting plane, that is, the distance to the front cabinet door, at least 25.4 mm (1 inch)?				

Reracking Review Items	Yes	No	NA	Comment
<p>Does the target rack meet the following minimum load capacity?</p> <ul style="list-style-type: none"> ■ 19kg/RU (42 lb/RU) ■ 785 kg (1730 lb) total 				
<p>Is the rack a four-post rack, for mounting at both front and rear?</p> <p>Two-post racks are not compatible with Recovery Appliance.</p>				
<p>Does the target rack's horizontal opening and unit vertical pitch conform to ANSI/EIA 310-D-1992 or IEC 60927 standards?</p>				
<p>Does the target rack have RETMA rail support?</p> <p>Recovery Appliance requires 19 inches (483 mm) for RETMA rail spacing width. The minimum rack width of 60 cm (23.6 inches) is recommended to accommodate the PDU and cable harnesses on the side. If the rack is less than 60 cm wide, then it must have additional depth to accommodate mounting behind the server cable management arms.</p>				
<p>Does the target rack support Oracle cable management arms?</p>				
<p>Does the target rack support the installation of Oracle vented and solid filler panels?</p>				
<p>Can the target rack support tie-downs along the left rear side (when viewed from the front of the rack) to support the InfiniBand cables?</p>				
<p>Can the target rack support tie-downs for the Ethernet wiring harness?</p>				
<p>Is there sufficient space for the cable harnesses and the PDUs in the target rack?</p>				
<p>Can a label that is printed with the Recovery Appliance serial number be attached to the target rack?</p>				

Customer-Supplied PDU Checklist

The following checklist is about the power distribution units (PDUs) when using the reracking service.

PDU Reracking Review Items	Yes	No	NA	Comment
Does the target rack support the installation of standard Oracle PDUs? If not, then complete this checklist.				
Can you provide two equivalent PDUs?				
Can you provide two PDUs with a capacity of 10 kVA per PDU?				
Can you provide at least 17 x 10A C13 plugs per PDU (34 total)?				
Can you provide a PDU and its circuits to support the Recovery Appliance power requirements, in case a PDU fails?				
Can you ensure that the power loads are evenly distributed across all circuits of a PDU?				
Can you provide power drops for the PDUs?				

Rack Recycling Checklist

The following checklist is about recycling the rack.

Recycling Review Items	Yes	No	NA	Comment
Do you want Oracle to take and recycle the empty rack? If yes, then the Oracle service engineer can pack the empty rack for recycling.				
If Oracle is recycling the rack, then have you completed the appropriate application at the Oracle Product Take Back and Recycling website? The website is at http://www.oracle.com/us/products/servers-storage/take-back-and-recycling/index.html				

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit

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