# **Oracle® Big Data Appliance**

Site Checklists Release 4 (4.13) E98479-02 August 2018

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

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

### ORACLE

Complete these checklists to ensure that the site is prepared for Oracle Big Data 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
- Oracle Enterprise Manager Checklist
- Reracking Checklists

For accessibility information, see "Documentation Accessibility" on page 1-14.

**Note:** Complete the PDF version of this document using Adobe Reader or Adobe Acrobat. Do not use other PDF readers. They may corrupt the file, so that other programs cannot read it.

#### System Components Checklist

Complete the following checklist to ensure that the system component concerns have been addressed.

| System Components Review<br>Items   | Yes | No | NA <sup>1</sup> | Comment |
|---|-----|----|-----------------|---------|
| Is the rack installation an<br>extension to an existing system,<br>rather than a new installation? If<br>it is an extension to an existing<br>system, then see the <i>Oracle Big</i><br><i>Data Appliance Owner's Guide</i> for<br>multirack cabling information. |     |    |                 |         |
| How many Oracle Big Data<br>Appliance racks will be installed?  | -   | _  | -               |         |
| Have you ordered the multirack cabling service?   |     |    |                 |         |
| If more than three racks will be<br>installed, then were additional,<br>longer cables ordered?  |     |    |                 |         |
| Are all Oracle Big Data Appliance racks adjacent to each other?   |     |    |                 |         |

| System Components Review Items  | Yes | No | NA <sup>1</sup> | Comment |
|---|-----|----|-----------------|---------|
| If the connecting racks are not<br>within the specified proximity,<br>then have you done the following<br>tasks:  |     |    |                 |         |
| <ul> <li>Purchased longer InfiniBand<br/>cables from an approved<br/>third-party provider?</li> </ul>   |     |    |                 |         |
| <ul> <li>Asked Oracle Support<br/>Services to provide and<br/>schedule the custom<br/>multirack cabling service<br/>with the installation?</li> </ul>                                 |     |    |                 |         |
| If you are connecting Oracle Big<br>Data Appliance to Oracle Exadata<br>Database Machine Half Rack,<br>then does the Exadata Machine<br>have a spine switch?                          |     |    |                 |         |
| If you are connecting to an Oracle<br>Exadata Database Machine with<br>no spine switch (except for the<br>eighth rack), then have you<br>ordered the Exadata Expansion<br>Switch Kit? |     |    |                 |         |
| If your data center does not have<br>a 10 GbE infrastructure, then<br>have you ordered an external<br>switch that supports both 10 GbE<br>(or 40 GbE) and 1 GbE?                      |     |    |                 |         |
| Have you purchased the cables<br>and transceivers to connect the<br>InfiniBand Gateway switches to<br>your 10 GbE network<br>infrastructure?  |     |    |                 |         |
| If the Ethernet switch will be<br>replaced, then have you arranged<br>for the replacement switch<br>installation?   |     |    |                 |         |
| Will additional equipment be attached to the rack? If yes, then describe the additions.   |     |    |                 |         |

<sup>1</sup> Not applicable to your installation

#### **Data Center Room Checklist**

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

For information about space and flooring requirements, see the *Oracle Big Data Appliance Owner's Guide*.

| Data Center Room   | Yes | No | NA | Comment |
|--|-----|----|----|---------|
| Has the Oracle Big Data<br>Appliance rack location been<br>allocated?  |     |    |    |         |
| Is the allocated location vacant<br>and ready for the new<br>equipment?  |     |    |    |         |
| Does the floor layout meet the equipment maintenance access requirements?  |     |    |    |         |
| 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<br>sufficient cutout space for the<br>power cord plugs to pass through<br>to the subfloor? |     |    |    |         |
| Can floor tiles be removed<br>without permission to<br>accommodate service?  |     |    |    |         |
| Will the new hardware location<br>require any nonstandard cable<br>lengths?  |     |    |    |         |
| Is the floor-to-ceiling height a minimum of 3.2 meters (10.5 feet)?  |     |    |    |         |

#### **Data Center Environment Checklist**

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

For information about temperature and humidity requirements, see the *Oracle Big Data Appliance Owner's Guide*.

| Data Center Environment<br>Review Items   | Yes | No | NA | Comment |
|---|-----|----|----|---------|
| Does the computer room air<br>conditioning system meet<br>temperature and humidity<br>requirements? |     |    |    |         |
| Does the installation floor layout satisfy the ventilation requirements?                            |     |    |    |         |

| Data Center Environment<br>Review Items  | Yes | No | NA | Comment |
|--|-----|----|----|---------|
| Will the equipment be positioned<br>so that the exhaust air of one rack<br>does not enter the air intake of<br>another rack? |     |    |    |         |
| Is each perforated floor tile rated<br>for air flow at 400 cubic feet per<br>minute or greater?                              |     |    |    |         |
| Do the data center air<br>conditioners provide sufficient<br>front-to-back airflow?  |     |    |    |         |
| Is airflow adequate to prevent hot spots?  |     |    |    |         |
| Can the data center continuously<br>satisfy environmental<br>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 the *Oracle Big Data Appliance Owner's Guide*.

| Access Route Review Items  | Yes | No | NA | Comment |
|--|-----|----|----|---------|
| Has the access route been<br>checked for clearances of the<br>packaged equipment?  |     |    |    |         |
| Do all the doors and entryways<br>conform to the width and height<br>requirements for transportation,<br>including the width of the<br>packaged equipment? |     |    |    |         |
| Do all the doors meet the height<br>requirement of 218.4 cm (86<br>inches) for packaged delivery?  |     |    |    |         |
| Does the access route provide<br>sufficient space for transport of<br>the packaged equipment?  |     |    |    |         |
| Are you concerned about any ramps or thresholds? If yes, then provide details.   |     |    |    |         |
| Are any stairs or ramps in the moving path for the new rack?   |     |    |    |         |
| Have you confirmed that all<br>route incline angles are within<br>the permitted range?   |     |    |    |         |

| Access Route Review Items  | Yes | No | NA | Comment   |
|--|-----|----|----|-----------|
| Have you confirmed that the<br>access route is free of any<br>obstacles that would expose the<br>rack to shock?                        |     |    |    |           |
| Are all the surfaces acceptable for rolling the new unpacked and packed equipment?   |     |    |    |           |
| If a pallet jack will be used, then<br>have you confirmed that it<br>supports the weight of the rack?                                  |     |    |    |           |
| If there are stairs, then is a loading elevator accessible for the equipment?  |     |    |    |           |
| If an elevator will be used:   |     |    |    | Width:    |
| <ul> <li>Is the elevator car wide<br/>enough for the device to be<br/>carried into it?</li> </ul>                                      |     |    |    | Height:   |
| <ul> <li>Is the elevator car tall<br/>enough for the device to be<br/>carried into it?</li> </ul>                                      |     |    |    | Capacity: |
| <ul> <li>Can the elevator handle the<br/>1134 kg (2500 lb) shipping<br/>weight?</li> </ul>   |     |    |    |           |
| <ul> <li>Does the elevator door meet<br/>the height requirement of<br/>218.4 cm (86 inches) for<br/>packaged rack delivery?</li> </ul> |     |    |    |           |
| Does the path from the receiving<br>location to the designated data<br>center area support the weight of<br>the unpacked equipment?    |     |    |    |           |
| Is the path onto the raised floor<br>rated for dynamic loading of the<br>server?   |     |    |    |           |

## Facility Power Checklist

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

For information about power requirements, see the *Oracle Big Data 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>B</b> : Low-voltage three-phase          |     |    |    |         |
| <b>C</b> : High-voltage single-phase        |     |    |    |         |
| <b>D</b> : High-voltage three-phase         |     |    |    |         |

| Facility Power Review Items   | Yes | No | NA | Comment |
|---|-----|----|----|---------|
| Are power outlets available for<br>the new equipment at the<br>designated location?   |     |    |    |         |
| Are enough power outlets<br>provided within 2 meters for<br>each rack?  |     |    |    |         |
| Do the power outlets have<br>appropriate socket receptacles for<br>the PDU option ordered?  |     |    |    |         |
| Will optional ground cables be attached to the rack?  |     |    |    |         |
| Are the circuit breakers for the<br>equipment suitable in terms of<br>voltage and current-carrying<br>capacities?                           |     |    |    |         |
| Does the power frequency meet the equipment specifications?   |     |    |    |         |
| What are the power requirements<br>of the system, such as operating<br>voltage and electric current level<br>of the device and peripherals? | -   | -  | -  |         |
| Do you have the minimum<br>required power sources to<br>support the power load for the<br>new hardware?                                     |     |    |    |         |
| Will system power be delivered from two separate grids?   |     |    |    |         |
| Is there an uninterruptible power<br>supply (UPS) to power the<br>equipment?  |     |    |    |         |

# Safety Checklist

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

For information about safety guidelines and about powering on and off, see the *Oracle Big Data 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?                              |     |    |    |         |
|  |     |    |    |         |

# **Logistics Checklist**

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

For information about unpacking and space requirements, see the *Oracle Big Data 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<br>or security clearances required for<br>vendor personnel to access the<br>data center? If yes, and you have a<br>recommended agency, then<br>provide the contact information. |     |    |    | Security agency name:<br>Telephone: |
| How many days in advance must background checks be completed?  |     | _  | —  |                                     |
| Are there any additional security access issues?   |     |    |    |                                     |
| Will sufficient moving personnel<br>be available to install the<br>hardware?   |     |    |    |                                     |
| Is union labor required for any<br>part of the delivery or<br>installation? If yes, then identify<br>which part.   |     |    |    |                                     |
| Are there any restrictions on<br>delivery truck length, width, or<br>height? If yes, then list the<br>maximum dimensions.  |     |    |    | Length:<br>Width:                   |
|  |     |    |    | Depth:                              |
| Does the delivery carrier require<br>any special equipment, such as<br>non-floor-damaging rollers,<br>transport dollies, pallet jacks, or<br>fork lifts?   |     |    |    |                                     |
| Will any of the following be required to place equipment in the computer room?   |     |    |    |                                     |
| <ul> <li>Stair walkers</li> </ul>  |     |    |    |                                     |
| <ul> <li>Lifters</li> </ul>  |     |    |    |                                     |
| <ul> <li>Ramps</li> </ul>  |     |    |    |                                     |
| <ul> <li>Steel plates</li> </ul>   |     |    |    |                                     |
| <ul> <li>Floor covers</li> </ul>   |     |    |    |                                     |
| Does the building have a delivery dock?  |     |    |    |                                     |

| Logistics Review Items   | Yes | No | NA | Comment             |
|--|-----|----|----|---------------------|
| Are there time constraints on dock access? If yes, then provide a schedule.  |     |    |    |                     |
| Is a tail lift required on the<br>delivery carrier to unload the<br>equipment at the delivery dock?                                      |     |    |    |                     |
| Is there a delivery, unpacking, and staging area?  |     |    |    |                     |
| Is the unpacking and staging area protected from the elements?   |     |    |    |                     |
| Is the delivery area inside?   |     |    |    |                     |
| If the delivery is not inside, then is the site prepared for uncrating?  |     |    |    |                     |
| Does the building have adequate receiving space?   |     |    |    |                     |
| Is the unpacking area<br>air-conditioned to avoid thermal<br>shock for various hardware<br>components?                                   |     |    |    |                     |
| Are you prepared for uncrating and trash removal?  |     |    |    |                     |
| Is computer room access available for installation personnel?  |     |    |    |                     |
| Are laptops, cell phones, and<br>cameras allowed in the data<br>center? If not, then list the<br>restricted devices.                     |     |    |    | Restricted devices: |
| Are cardboard boxes and other<br>packing material allowed in the<br>computer room?   |     |    |    |                     |
| If packing material is not allowed<br>in the computer room, then do<br>ground-level deliveries require a<br>truck with a side rail lift? |     |    |    |                     |

### **Network Configuration Checklist**

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

For information about network requirements, see the *Oracle Big Data Appliance Owner's Guide*.

**Note:** A problem with the customer network configuration may cause extended delays. To detect potential issues and resolve them quickly, ensure that the network administrator is available on-site during the installation of Oracle Big Data Appliance (1 to 2 days).

| Network Configuration Review Items  | Yes | No | NA | Comment |
|---|-----|----|----|---------|
| Were any errors reported while<br>running the<br>preinstall-checkip.sh script to<br>verify the network configuration?<br>If so, describe the issue. See the<br><i>Oracle Big Data Appliance Owner's</i><br><i>Guide</i> .                     |     |    |    |         |
| Did you run the required<br>network cables from your<br>network equipment to the<br>location where Oracle Big Data<br>Appliance will be installed?  |     |    |    |         |
| Did you label the network cables<br>that will connect to Oracle Big<br>Data Appliance?  |     |    |    |         |
| How may 10 GbE connections<br>will be configured for each<br>gateway switch? You can have 1<br>to 8 connections for each switch<br>for a total of 2 to 16 connections<br>for an appliance. The minimum is<br>two connections: one per switch. |     |    |    |         |
| Will the Cisco Ethernet switch have IP routing disabled?  |     |    |    |         |

## Auto Service Request Checklist

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

For information about Auto Service Request, see the *Oracle Big Data Appliance Owner's Guide*.

| Auto Service Request Checks   | Yes | No | NA | Comment |
|---|-----|----|----|---------|
| Do you have a My Oracle<br>Support account?   |     |    |    |         |
| Do you have your Oracle<br>Customer Support Identifier<br>(CSI)?  |     |    |    |         |
| Do you have the host name and<br>IP address of the server that will<br>host ASR Manager?                        |     |    |    |         |
| Does the system need a proxy<br>server? If so, what is the host<br>name and IP address for the<br>proxy server? |     |    |    |         |

| Auto Service Request Checks   | Yes | No | NA | Comment |
|---|-----|----|----|---------|
| Do you have the technical contact<br>information for Auto Service<br>Request? This information<br>includes the first name, last name,<br>and email address of the contact<br>and the correct shipping address<br>for the systems. |     |    |    |         |
| <b>Note</b> : Verify the serial numbers<br>because multiple systems at<br>multiple sites may be listed under<br>the same Customer Support<br>Identifier.  |     |    |    |         |

### **Oracle Enterprise Manager Checklist**

Complete the following checklist if you are planning to use the Oracle Enterprise Manager system-monitoring plugin for Oracle Big Data Appliance.

For general information about the plugin, see *Oracle Big Data Appliance User's Guide*. For installation instructions and additional requirements, see *Oracle Enterprise Manager System Monitoring Plug-in Installation Guide for Oracle Big Data Appliance*.

| Enterprise Manager Checks  | Yes | No | NA | Comment |
|--|-----|----|----|---------|
| Have you installed Oracle<br>Management System (OMS)<br>12.1.0.2.0 or higher?  |     |    |    |         |
| Is OMS on the same<br>administrative network as Oracle<br>Big Data Appliance?  |     |    |    |         |
| OMS must be able to reach the<br>servers, switches, and PDUs, and<br>Oracle Big Data Appliance must<br>be able to reach OMS. |     |    |    |         |

### **Reracking Checklists**

Reracking of an Oracle Big Data Appliance rack with up to 12 servers is allowed if your site requires a specialized infrastructure. Oracle Big Data Appliance full racks cannot be reracked because of potential air flow and cooling issues.

#### Note:

- You must purchase both the Oracle Reracking Service and the Oracle Installation Service.
- Oracle does not provide support for customer-supplied equipment.

Complete the following checklists before reracking an Oracle Big Data Appliance starter rack or a starter rack with additional servers added using High Capacity Nodes plus InfiniBand Infrastructure.

| <b>Reracking Considerations</b>  | Yes | No | NA | Comment |
|--|-----|----|----|---------|
| Have you purchased the Oracle<br>Reracking Service?  |     |    |    |         |
| Have you purchased the Oracle<br>Installation Service?   |     |    |    |         |
| Do you have a cart that can carry<br>the weight of the servers, to move<br>the components and associated<br>cabling from the Oracle Big Data<br>Appliance rack to your rack? |     |    |    |         |
| Do the target rack dimensions meet the following requirements:   |     |    |    |         |
| Height: 42 RU  |     |    |    |         |
| • Width: 600 mm (23.6 inches)  |     |    |    |         |
| <ul> <li>Depth: 1112 mm (43.78<br/>inches) without front or rear<br/>doors</li> </ul>  |     |    |    |         |
| If the target rack is less than 42 RU:   |     |    |    |         |
| • Is it at least 30 RU tall?   |     |    |    |         |
| <ul> <li>Does it include compatible<br/>PDUs?</li> </ul>   |     |    |    |         |
| You must provide compatible<br>PDUs to install in a target rack<br>that is less than 42 RU.  |     |    |    |         |
| Is the distance between the front<br>and rear mounting planes<br>between the minimum of 610 mm<br>and the maximum 915 mm (24<br>inches to 36 inches)?                        |     |    |    |         |
| Is the clearance depth in the front<br>of the front mounting plane, that<br>is, the distance to the front cabinet<br>door, at least 25.4 mm (1 inch)?                        |     |    |    |         |
| Does the target rack meet the following minimum load capacity?   |     |    |    |         |
| ■ 19kg/RU (42 lb/RU  |     |    |    |         |
| <ul> <li>785 kg (1730 lb) total</li> </ul>   |     |    |    |         |
| Is the rack a four-post rack, for mounting at both front and rear?   |     |    |    |         |
| Two-post racks are not<br>compatible with Oracle Big Data<br>Appliance.  |     |    |    |         |
| Does the target rack's horizontal<br>opening and unit vertical pitch<br>conform to ANSI/EIA 310-D-1992<br>or IEC 60927 standards?  |     |    |    |         |

| Reracking Considerations   | Yes | No | NA | Comment |
|--|-----|----|----|---------|
| Does the target rack have RETMA rail support?  |     |    |    |         |
| Oracle Big Data Appliance<br>requires 19 inches (483 mm) for<br>RETMA rail spacing width. The<br>minimum rack width of 600 mm<br>(23.6 inches) is recommended to<br>accommodate the PDU and cable<br>harnesses on the side. If the rack<br>is less than 600 mm wide, then it<br>must have additional depth to<br>accommodate mounting behind<br>the server CMAs. |     |    |    |         |
| Does the target rack support<br>Oracle cable management arms<br>(CMAs)?  |     |    |    |         |
| Does the target rack support the installation of Oracle vented and solid filler panels?  |     |    |    |         |
| Can the target rack support<br>tie-downs along the left rear side<br>(when viewed from the front of<br>the rack) to support the<br>InfiniBand cables?  |     |    |    |         |
| Can the target rack support<br>tie-downs for the Ethernet wiring<br>harness?   |     |    |    |         |
| Is there sufficient space for the cable harnesses and the PDUs in the target rack?   |     |    |    |         |
| Can a label that is printed with<br>the Oracle Big Data Appliance<br>serial number be attached to the<br>target rack?  |     |    |    |         |

## Customer-Supplied PDU Checklist

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

| PDU Reracking Considerations   | 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<br>C13 plugs per PDU (34 total)?     |     |    |    |         |

| PDU Reracking Considerations  | Yes | No | NA | Comment |
|---|-----|----|----|---------|
| Can you provide a PDU and its<br>circuits to support the Oracle Big<br>Data Appliance power<br>requirements, in case a PDU fails? |     |    |    |         |
| Can you ensure that the power<br>loads are evenly distributed<br>across all circuits of a PDU?                                    |     |    |    |         |
| Can you provide power drops for the PDUs?   |     |    |    |         |

#### **Rack Recycling Checklist**

The following checklist is specific to recycling the rack.

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

#### 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
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing
impaired.

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