

## **Installation Template**

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| Customer Name :        |  |
|------------------------|--|
| Application:           | 2445XV8080                                     |
| Name Prefix :          | exa4   |
| Network Domain :       | prod.d002.loc                                  |
|                        | 10.25.64.48                                    |
| DNS Servers:           | 10.5.5.5                                       |
|                        | 10.5.15.5                                      |
| NTP Servers :          | 10.2.128.20                                    |
| NIF Servers .          | 10.2.128.21                                    |
| Timezone :             |  |
| Comments : version: 20 | 250422 - regenerated with OEDA Version: 250313 |

# Management Network Configuration All IP addresses and corresponding host names should be registered in DNS The Admin network defines the hostname and default gateway for all Storage nodes

Starting IP Address: 10.25.96.68 Subnet Mask: 255.255.248.0 Gateway: 10.25.96.1 Admin Network Type: 1/10Gbit Copper Non-Bonded

#### **Server Components**

| Rack U Location             | Component       | NET0 Name    | NET0 IP Address | ILOM Name         | ILOM IP Address | NETO VLAN ID |  |  |
|-----------------------------|-----------------|--------------|-----------------|-------------------|-----------------|--------------|--|--|
| X10M Elastic Rack HC 227    | гв -            |              |                 |                   |                 |              |  |  |
| 16                          | Database Server | exa4dbadm02  | 10.25.99.80     | exa4dbadm02-ilom  | 10.25.99.68     |              |  |  |
| 14                          | Database Server | exa4dbadm01  | 10.25.99.79     | exa4dbadm01-ilom  | 10.25.99.69     |              |  |  |
| 8                           | Storage Server  | exa4celadm04 | 10.25.99.84     | exa4celadm04-ilom | 10.25.99.73     |              |  |  |
| 6                           | Storage Server  | exa4celadm03 | 10.25.99.83     | exa4celadm03-ilom | 10.25.99.72     |              |  |  |
| 4                           | Storage Server  | exa4celadm02 | 10.25.99.82     | exa4celadm02-ilom | 10.25.99.71     |              |  |  |
| 2                           | Storage Server  | exa4celadm01 | 10.25.99.81     | exa4celadm01-ilom | 10.25.99.70     |              |  |  |
| Switch and Power Components |                 |              |                 |                   |                 |              |  |  |

| Rack U Location<br>X10M Elastic Rack HC 22TB | Component    | Admin Name    | Admin IP Address |  |
|--|--------------|---------------|------------------|--|
| 22   | Leaf Switch  | exa4sw-roceb0 | 10.25.99.75      |  |
| 21   | Admin Switch | exa4sw-adm0   | 10.25.99.78      |  |
| 20   | Leaf Switch  | exa4sw-rocea0 | 10.25.99.74      |  |
| 0  | PDU Switch   | exa4sw-pdua0  | 10.25.99.76      |  |
| 0  | PDU Switch   | exa4sw-pdub0  | 10.25.99.77      |  |

# Client Access Network Configuration All IP addresses and corresponding host names should be registered in DNS

Starting IP Address: 10.2.163.176
Subnet Mask: 255.255.248.0
Gateway: 10.2.160.1
Client Network Type: Slot 3 - Dual 25G CX6-LX optical Bonded
Client Network Interface: eth9,eth10

Enabled, please ensure switches support LACP and configured for

LACP: LACP and aggregation
BONDING OPTS="mode=802.3ad miimon=100 downdelay=200
updelay=200 lacp\_rate=1 xmit\_hash\_policy=layer3+4"

| Rack U Location<br>X10M Elastic Rack HC 22TB | Component       | Client Name | Client IP Address | VIP Name     | VIP IP Address | VLAN ID |
|--|-----------------|-------------|-------------------|--------------|----------------|---------|
| 16   | Database Server | exa4db02    | 10.2.163.177      | exa4db02-vip | 10.2.163.179   | 2191    |
| 14   | Database Server | exa4db01    | 10.2.163.176      | exa4db01-vip | 10.2.163.178   | 2191    |

## **Private RoCE Network Configuration**

Starting IP Address: 192.168.10.1 Subnet Mask: 255.255.252.0

Private network Name Private IP Address X10M Elastic Rack HC 22TB 192.168.10.3 Database Server exa4db02-priv1 exa4db02-priv1 exa4db02-priv2 exa4db01-priv1 exa4de01-priv2 exa4cel04-priv1 exa4cel04-priv2 192.168.10.4 192.168.10.1 192.168.10.1 192.168.10.1 192.168.10.11 14 Database Server 8 Storage Server exa4cel03-priv1 exa4cel03-priv2 exa4cel02-priv1 exa4cel02-priv2 exa4cel01-priv1 exa4cel01-priv2 6 Storage Server 192.168.10.9 192.168.10.10 Storage Server 192,168,10,7 192.168.10.7 192.168.10.8 192.168.10.5 192.168.10.6 Storage Server

## **Backup Network Configuration**

Starting IP Address: 10.21.97.120
Subnet Mask: 255.255.248.0
Gateway: 10.21.96.1
Backup Network Type: Slot 8 - Dual 25G CX6-LX Optical Non-Bonded
Backup Network Interface: eth29,eth30

Enabled, please ensure switches support LACP and configured for LACP and

Enabled, picase clisuic santones support and a support a support and a support a s

| Rack U Location          | Component       | Backup Name | Backup IP Address | Backup VIP Name | Backup VIP Address | VLAN ID |
|--------------------------|-----------------|-------------|-------------------|-----------------|--------------------|---------|
| X10M Elastic Rack HC 22T | В               |             |                   |                 |                    |         |
| 16                       | Database Server | exa4db02s   | 10.21.97.121      |                 |                    | 2193    |
| 14                       | Database Server | exa4db01s   | 10.21.97.120      |                 |                    | 2193    |

#### **Clusters Information**

To ensure better data protection, Oracle requires databases to be configured with ASM High Redundancy on 5+ year old Exadata systems. Please refer to MOS Note:2075007.1 for additional details.

#### Cluster:Cluster-exa4

#### **Cluster Information:**

Information:

Version Name
Cluster-exa4

Customer Name
Application 2445XV8080

Home 1001/app/07al.00.0/grid
Inventory Location /u01/app/0ralnventory
Base Dir /u01/app/orale
Client Domain prod.d002.loc
Backup Location
Backup Domain prod.d002.loc
Client Scan Name
Client Scan Name
Client Scan IPS
102.163.181
102.163.181
102.163.182

Total Physical Memory Size
2304CB
Client Gateway
102.160.1 Tysical memory Size 2304GB Client Gateway 102.160.1 Client Subnet Mask DNS Server(s) 10.5.5.5 10.5.15.5 NTP Server(s)

WriteBack Flash Cache
Admin Network As Hostname
Admin Network As Gateway
Client Network As Gateway
Client Network As Gateway
Client Network As Gateway
true
Client Network LACP
Backup Network LACP
Universit

#### **Cluster Owner and Groups**

| Cluster<br>User | User<br>Id |          | Groups |               |              |  |
|-----------------|------------|----------|--------|---------------|--------------|--|
|                 |            | Name     | Id     | Type          |              |  |
| oracle          | 1001       | oinstall | 1002   | OINSTALLGROUP | /home/oracle |  |
| 1               |            | dha      | 1001   | DRA GROUP     |              |  |

#### **Database:**

Database:

Version 23.6.0.24.10

CDB Name cdb1

PDB Name pdb1

Database Home /u01/app/oracle/product/23.0.0.0/dbhome\_1

Discount /u01/app/oracle/product/23.0.0.0/dbhome\_1

Database Template

OLTP

Database Template

Character Sets

Base Dir /u01/app/oracle

caa-ddbadm01.prod.d002.loc

caa-ddbadm01.prod.d002.loc

caa-ddbadm02.prod.d002.loc

caa-ddbadm02.prod.d002.loc

caa-ddbadm02.prod.d002.loc

caa-ddbadm02.prod.d002.loc

caa-ddbadm02.prod.d002.loc

caa-ddbadm02.prod.d002.loc

#### **Database Owner and Groups**

| User   | ID   |                         | Groups                    |                                    |              |  |
|--------|------|-------------------------|---------------------------|------------------------------------|--------------|--|
| oracle | 1001 | Name<br>oinstall<br>dba | <u>Id</u><br>1002<br>1001 | Type<br>OINSTALLGROUP<br>DBA_GROUP | /home/oracle |  |

#### Database:

Version 19.25.0.0.241015

CDB Name cdb2
PDB Name pdb1

Database Home /u01/app/oracle/product/19.0.0.0/dbhome\_1

Inventory Location /u01/app/oralnventory

Block Size 8192

Database Template
Database Type RAC Database
Character Sets AL32UTF8

Base Dir /u01/app/oracle

Exa4dbadm01.prod.d002.loc
exa4dbadm01.prod.d002.loc
exa4dbadm02.prod.d002.loc

## **Database Owner and Groups**

| User   | ID   |                         | Groups             |                                    |              |  |
|--------|------|-------------------------|--------------------|------------------------------------|--------------|--|
| oracle | 1001 | Name<br>oinstall<br>dba | Id<br>1002<br>1001 | Type<br>OINSTALLGROUP<br>DBA_GROUP | /home/oracle |  |

#### Storage:

#### **ASM Disk Groups**

| Disk<br>Group<br>Name | Redundancy | Storage<br>Allocation | Туре | OCR/Vote | Quorum | Storage<br>Servers   |
|-----------------------|------------|-----------------------|------|----------|--------|--|
| DATAC1                | NORMAL     | 393389 GB<br>(80%)    | DATA | Yes      | No     | exa4celadm01<br>exa4celadm02<br>exa4celadm03<br>exa4celadm04 |
| RECOC1                | NORMAL     | 98347 GB<br>(20%)     | RECO | No       | No     | exa4celadm01<br>exa4celadm02<br>exa4celadm03<br>exa4celadm04 |

#### **Storage Servers**

| Storage Server Name | # of Disks | Total Disk Space (GB) |
|---------------------|------------|-----------------------|
| exa4celadm01        | 12         | 264000                |
| exa4celadm02        | 12         | 264000                |
| exa4celadm03        | 12         | 264000                |
| exa4celadm04        | 12         | 264000                |



## X10M Elastic Rack HC 22TB

| Machine Type  | Serial Number | Rack Position | Server Name  | Mgt Name<br>IP<br>Netmask<br>Bonded                 | Public Hostname<br>IP<br>Netmask<br>Bonded       | Private Name<br>IP<br>Netmask<br>Bonded  | ILOM Hostname<br>IP<br>Netmask                    | VIP Name<br>IP               |
|---|---------------|---------------|--------------|---|--|--|---|------------------------------|
| Leaf Switch   | N/A           | 22            |              | exa4sw-roceb0<br>10.25.99.75<br>255.255.248.0<br>No | N/A  | N/A  | N/A   | N/A                          |
| Admin Switch  | N/A           | 21            |              | exa4sw-adm0<br>10.25.99.78<br>255.255.248.0<br>No   | N/A  | N/A  | N/A   | N/A                          |
| Leaf Switch   | N/A           | 20            |              | exa4sw-rocea0<br>10.25.99.74<br>255.255.248.0<br>No | N/A  | N/A  | N/A   | N/A                          |
| Database Server<br>X10M Compute Node<br>Linux x86-64    | N/A           | 16            | exa4dbadm02  | exa4dbadm02<br>10.25.99.80<br>255.255.248.0<br>No   | exa4db02<br>10.2.163.177<br>255.255.248.0<br>Yes | exa4db02-priv1<br>192.168.10.3<br>exa4db02-priv2<br>192.168.10.4<br>255.255.252.0<br>Active-Active     | exa4dbadm02-ilom<br>10.25.99.68<br>255.255.248.0  | exa4db02-vip<br>10.2.163.179 |
| Database Server<br>X10M Compute Node<br>Linux x86-64    | N/A           | 14            | exa4dbadm01  | exa4dbadm01<br>10.25,99.79<br>255.255.248.0<br>No   | exa4db01<br>10.2.163.176<br>255.255.248.0<br>Yes | exa4db01-priv1<br>192.168.10.1<br>exa4db01-priv2<br>192.168.10.2<br>255.255.252.0<br>Active-Active     | exa4dbadm01-ilom<br>10.25,99.69<br>255.255.248.0  | exa4db01-vip<br>10.2.163.178 |
| Storage Server<br>10M Cell Node HC 22TB<br>Linux x86-64 | N/A           | 8             | exa4celadm04 | exa4celadm04<br>10.25.99.84<br>255.255.248.0<br>No  | N/A  | exa4cel04-priv1<br>192.168.10.11<br>exa4cel04-priv2<br>192.168.10.12<br>255.255.252.0<br>Active-Active | exa4celadm04-ilom<br>10.25.99.73<br>255.255.248.0 | N/A                          |
| Storage Server<br>10M Cell Node HC 22TB<br>Linux x86-64 | N/A           | 6             | exa4celadm03 | exa4celadm03<br>10.25.99.83<br>255.255.248.0<br>No  | N/A  | exa4cel03-priv1<br>192.168.10.9<br>exa4cel03-priv2<br>192.168.10.10<br>255.255.252.0<br>Active-Active  | exa4celadm03-ilom<br>10.25.99.72<br>255.255.248.0 | N/A                          |
| Storage Server<br>10M Cell Node HC 22TB<br>Linux x86-64 | N/A           | 4             | exa4celadm02 | exa4celadm02<br>10.25.99.82<br>255.255.248.0<br>No  | N/A  | exa4cel02-priv1<br>192.168.10.7<br>exa4cel02-priv2<br>192.168.10.8<br>255.255.252.0<br>Active-Active   | exa4celadm02-ilom<br>10.25.99.71<br>255.255.248.0 | N/A                          |
| Storage Server<br>10M Cell Node HC 22TB<br>Linux x86-64 | N/A           | 2             | exa4celadm01 | exa4celadm01<br>10.25.99.81<br>255.255.248.0<br>No  | N/A  | exa4cel01-priv1<br>192.168.10.5<br>exa4cel01-priv2<br>192.168.10.6<br>255.255.252.0<br>Active-Active   | exa4celadm01-ilom<br>10.25.99.70<br>255.255.248.0 | N/A                          |
| PDU Switch  | N/A           | 0             |              | exa4sw-pdua0<br>10.25.99.76<br>255.255.248.0<br>No  | N/A  | N/A  | N/A   | N/A                          |
| PDU Switch  | N/A           | 0             |              | exa4sw-pdub0<br>10.25.99.77<br>255.255.248.0<br>No  | N/A  | N/A  | N/A   | N/A                          |

|  | Platin | um | Con | figuı | ration |
|--|--------|----|-----|-------|--------|
|--|--------|----|-----|-------|--------|

Unavailable for configuration because it is disabled

## **Alerts**

#### **Cell Alert Delivery Configuration**

SNMP Server N/A SNMP Port N/A SNMP Community N/A

SMTP Server smtplb.prod.d002.loc SMTP Port 25 SSL FALSE fbi-betrieb@ horst.pfitzner@ Email From fp\_bi-betrieb@ From Name Exadata EXA4

## **ASR Configuration**

ASR Manager Hostname anopfli27044523.prod.d002.loc
ASR Technical Contact Name Horst Pfitzner
MOS Contact Email horst.pfitzner@
MOS Account Name horst.pfitzner@
HTTP Proxy Perver N/A
HTTP Proxy Port 80
HTTP Proxy User N/A

## **OCM Configuration**

MOS Email N/A Support Hub Host Name N/A Support Hub User Name N/A HITP Proxy Server N/A HTTP Proxy Port N/A HTTP Proxy User N/A

## **EM Configuration**

EM Home base N/A
OMS Machine N/A
OMS HTTP Upload port N/A

## Appendix A: Network Names and IPs

#### **Total Network IPs: 38** Admin Network: (11)

| IP Address     | FODN                        | Short Hostnam |
|----------------|-----------------------------|---------------|
| 10.25.99.79/21 | exa4dbadm01.prod.d002.loc   | exa4dbadm01   |
| 10.25.99.80/21 | exa4dbadm02.prod.d002.loc   | exa4dbadm02   |
| 10.25.99.81/21 | exa4celadm01.prod.d002.loc  | exa4celadm01  |
| 10.25.99.82/21 | exa4celadm02.prod.d002.loc  | exa4celadm02  |
| 10.25.99.83/21 | exa4celadm03.prod.d002.loc  | exa4celadm03  |
| 10.25.99.84/21 | exa4celadm04.prod.d002.loc  | exa4celadm04  |
| 10.25.99.78/21 | exa4sw-adm0.prod.d002.loc   | exa4sw-adm0   |
| 10.25.99.74/21 | exa4sw-rocea0.prod.d002.loc | exa4sw-rocea0 |
| 10.25.99.75/21 | exa4sw-roceb0.prod.d002.loc | exa4sw-roceb0 |
| 10.25.99.76/21 | exa4sw-pdua0.prod.d002.loc  | exa4sw-pdua0  |
| 10.25.99.77/21 | exa4sw-pdub0.prod.d002.loc  | exa4sw-pdub0  |
|                |                             |               |

#### **ILOM Network: (6)**

| FQDN                            | Short Hostname  |
|---------------------------------|---|
| exa4dbadm01-ilom.prod.d002.loc  | exa4dbadm01-ilom  |
| exa4dbadm02-ilom.prod.d002.loc  | exa4dbadm02-ilom  |
| exa4celadm01-ilom.prod.d002.loc | exa4celadm01-ilon   |
| exa4celadm02-ilom.prod.d002.loc | exa4celadm02-ilon   |
| exa4celadm03-ilom.prod.d002.loc | exa4celadm03-ilon   |
| exa4celadm04-ilom.prod.d002.loc | exa4celadm04-ilon   |
|                                 | exa4dbadm01-ilom.prod.d002.loc<br>exa4dbadm02-ilom.prod.d002.loc<br>exa4celadm01-ilom.prod.d002.loc<br>exa4celadm02-ilom.prod.d002.loc<br>exa4celadm03-ilom.prod.d002.loc |

#### Client Network: (2)

| IP Address      | FQDN                   | Short Hostname | VLAN I |
|-----------------|------------------------|----------------|--------|
| 10.2.163.176/21 | exa4db01.prod.d002.loc | exa4db01       | 2191   |
| 10.2.163.177/21 | exa4db02.prod.d002.loc | exa4db02       | 2191   |

## VIP Network: (2)

| IP Address      | FQDN                       | Short Hostname | VLAN ID |
|-----------------|----------------------------|----------------|---------|
| 10.2.163.178/21 | exa4db01-vip.prod.d002.loc | exa4db01-vip   | 2191    |
| 10.2.163.179/21 | exa4db02-vip.prod.d002.loc | exa4db02-vip   | 2191    |

#### Client SCAN IPs: (3)

| IP Address   | FQDN                     | Short Hostnam |  |
|--------------|--------------------------|---------------|--|
| 10.2.163.180 | exa4-scan1.prod.d002.loc | exa4-scan1    |  |
| 10.2.163.181 | exa4-scan1.prod.d002.loc | exa4-scan1    |  |
| 10.2.163.182 | exa4-scan1.prod.d002.loc | exa4-scan1    |  |

#### Private Network: (12)

| Private Network: (12) |                               |                 |  |
|-----------------------|-------------------------------|-----------------|--|
| IP Address            | FQDN                          | Short Hostnam   |  |
| 192.168.10.1/22       | exa4db01-priv1.prod.d002.loc  | exa4db01-priv1  |  |
| 192.168.10.2/22       | exa4db01-priv2.prod.d002.loc  | exa4db01-priv2  |  |
| 192.168.10.3/22       | exa4db02-priv1.prod.d002.loc  | exa4db02-priv1  |  |
| 192.168.10.4/22       | exa4db02-priv2.prod.d002.loc  | exa4db02-priv2  |  |
| 192.168.10.5/22       | exa4cel01-priv1.prod.d002.loc | exa4cel01-priv1 |  |
| 192.168.10.6/22       | exa4cel01-priv2.prod.d002.loc | exa4cel01-priv2 |  |
| 192.168.10.7/22       | exa4cel02-priv1.prod.d002.loc | exa4cel02-priv1 |  |
| 192.168.10.8/22       | exa4cel02-priv2.prod.d002.loc | exa4cel02-priv2 |  |
| 192.168.10.9/22       | exa4cel03-priv1.prod.d002.loc | exa4cel03-priv1 |  |
| 192.168.10.10/22      | exa4cel03-priv2.prod.d002.loc | exa4cel03-priv2 |  |
| 192.168.10.11/22      | exa4cel04-priv1.prod.d002.loc | exa4cel04-priv1 |  |
| 192.168.10.12/22      | exa4cel04-priv2.prod.d002.loc | exa4cel04-priv2 |  |
|                       |                               |                 |  |

## Backup Network: (2)

| IP Address      | FQDN                    | Short Hostname | VLAN ID |
|-----------------|-------------------------|----------------|---------|
| 10.21.97.120/21 | exa4db01s.prod.d002.loc | exa4db01s      | 2193    |
| 10 21 97 121/21 | eva4db02s prod d002 loc | eva4db02s      | 2193    |

#### **Backup SCAN IPs: (0)**

## **Appendix B: Required Files and Patches**

Download the following files from MOS into the Oracle Exadata Deployment Assistant's WorkDir directory

p37173338\_23602410GIRU\_Linux-x86-64.zip p37173344\_23602410DBRU\_Linux-x86-64.zip p37173404\_1925000DBRU\_Linux-x86-64.zip ahf\_setup (Autonomous Health Framework setup file)

Please download Autonomous Health Framework (AHF) setup file from My Oracle Support using patch number 30166242 and unzip the file into Workdir. If a patch is unavailable on MOS for a given release, please contact Oracle Support to request the patch for that release. If the host image version is 19.3.0.0.0, please upgrade to image version greater than 19.3.0.0.0. Secure Fabric requires Exadata image version 20.1.0.0.0 or newer.

