

```
[oracle@srv1 home]$ ls
em13c  grid  oracle  orauser
[oracle@srv1 home]$ cd em13c
[oracle@srv1 em13c]$ ls
em13100_linux64-2.zip  em13100_linux64-3.zip  em13100_linux64-4.zip  em13100_linux64-5.zip  em13100_linux64.bin
[oracle@srv1 em13c]$ ls -lrt
total 6616032
-rwxrwxrwx. 1 oracle oinstall 331590923 Jul 11 18:33 em13100_linux64-5.zip
-rwxrwxrwx. 1 oracle oinstall 841114290 Jul 11 18:45 [REDACTED]
-rwxrwxrwx. 1 oracle oinstall 1315250699 Jul 11 19:00 em13100_linux64-2.zip
-rwxrwxrwx. 1 oracle oinstall 2145473190 Jul 11 19:17 em13100_linux64-3.zip
-rwxrwxrwx. 1 oracle oinstall 2141357330 Jul 11 19:18 em13100_linux64-4.zip
[oracle@srv1 em13c]$ ./em13100_linux64.bin
0%.....█
```

g to FontSet conversion  
irectory

ux64-3.zip 6

590923 Jul 11  
114290 Jul 11  
250699 Jul 11  
473190 Jul 11  
357330 Jul 11  
ux64.bin  
.....  
112016-07-11  
r  
MHz. Actual  
ed to display  
er than 512 M  
a 64-bit JVM  
er than 300 M

versal Instal  
PM/stage/pre  
2016-07-11\_08  
8-23PM  
/Disk1/instal  
t  
c  
1 08-28-23PM/oui/em/  
016-07-11 08-28-23PM

Oracle Enterprise Manager Cloud Control 13c Installation - Step 1 of 10

**My Oracle Support Details** ORACLE Enterprise Manager Cloud Control 13c

Provide your email address to be informed of security issues, install the product and initiate configuration manager. [View details.](#)

Email:

Easier for you if you use your My Oracle Support email address/username.

I wish to receive security updates via My Oracle Support.

My Oracle Support Password:

Help < Back Next > Install Cancel

g to FontSet conversion  
irectory

ux64-3.zip

590923 Jul 11

114290 Jul 11

250699 Jul 11

473190 Jul 11

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ux64.bin

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PM/stage/pre

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/Disk1/instal

1\_08-28-23PM/oui/em/

16-07-11-08-28-23PM

Oracle Enterprise Manager Cloud Control 13c Installation - Step 2 of 10

### Software Updates

ORACLE Enterprise Manager Cloud Control 13c

- My Oracle Support Details
- Software Updates**
- Prerequisite Checks
- Installation Types
- Installation Details
- Configuration Details
- Shared Location Details
- Review
- Install Progress
- Finish

Skip

Search for Updates (Prerequisites, Critical Patches, Interim Patches, Plug-ins, etc.)

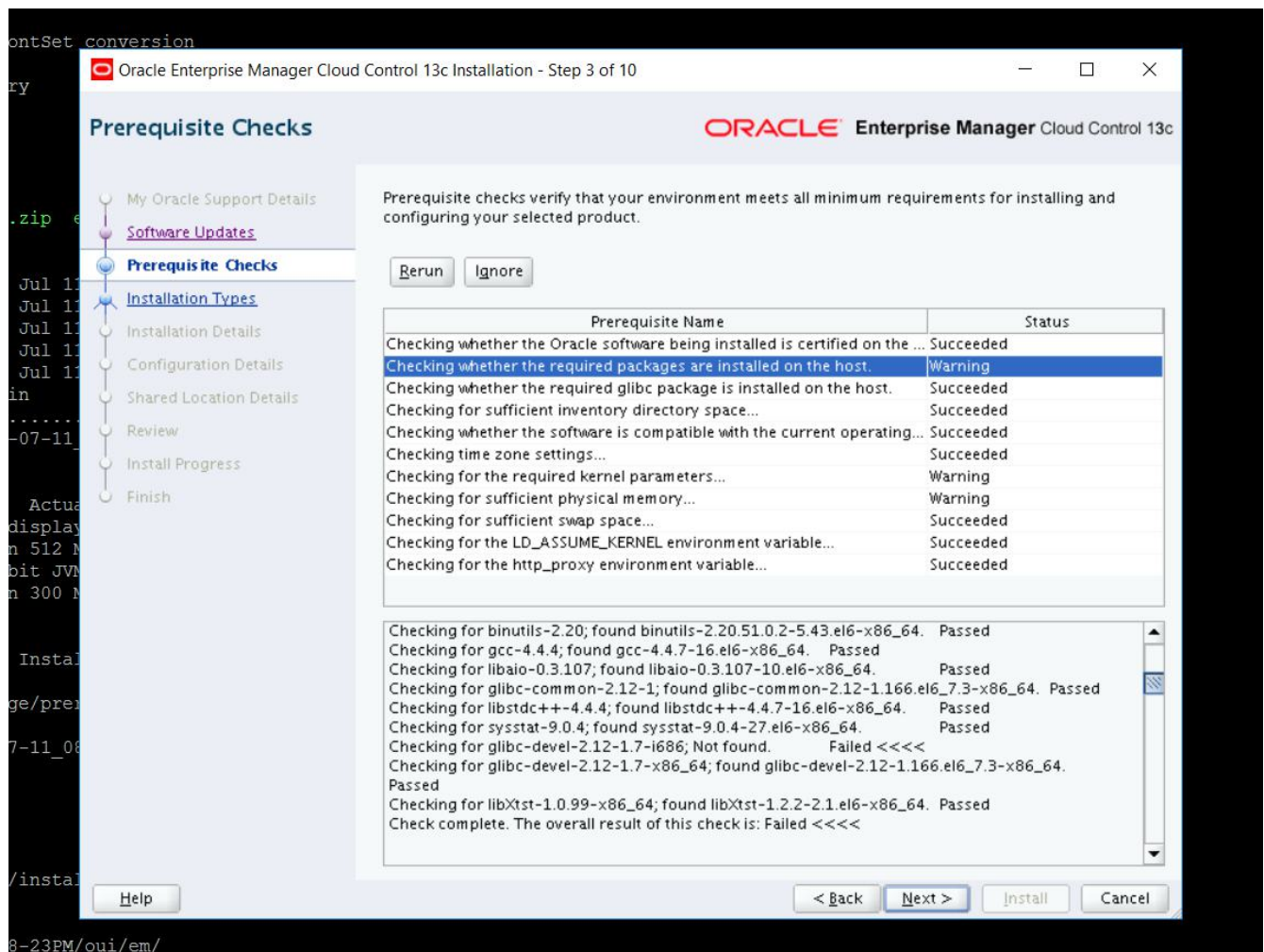
Local Directory  

My Oracle Support (Requires Internet Connection)

User Name

Password

Messages:



## Resolved – Checking for glibc-devel-2.12-1.7-i686; Not found. Failed

So from above, we can see that it's complaining about missing package "glibc-devel-2.12-1.7-i686"(Checking for glibc-devel-2.12-1.7-i686; Not found. Failed). And I found there were glibc related packages on the system:

```
[root@testvm ~]# rpm -qa|grep glibc
glibc-common-2.12-1.149.el6_6.7.x86_64
glibc-devel-2.12-1.149.el6_6.7.x86_64
glibc-headers-2.12-1.149.el6_6.7.x86_64
glibc-2.12-1.149.el6_6.7.x86_64
```

But they were all x86\_64 version, not the missing i686 one. So I determined to install i686 ones:

```
[root@testvm]# yum install -y glibc.i686 glibc-devel.i686 glibc-static.i686
```

After this, and press "Rerun", the check succeeded.

```
[root@srv1 ~]# rpm -qa|grep glibc
glibc-headers-2.12-1.166.el6_7.3.x86_64
glibc-common-2.12-1.166.el6_7.3.x86_64
glibc-devel-2.12-1.166.el6_7.3.x86_64
glibc-2.12-1.166.el6_7.3.x86_64
[root@srv1 ~]# yum install -y glibc.i686 glibc-devel.i686 glibc-static.i686
Loaded plugins: refresh-packagekit, security, ulninfo
Setting up Install Process
Resolving Dependencies
--> Running transaction check
---> Package glibc.i686 0:2.12-1.192.el6 will be installed
--> Processing Dependency: glibc-common = 2.12-1.192.el6 for package: glibc-2.12-1.192.el6.i686
--> Processing Dependency: libfreebl3.so for package: glibc-2.12-1.192.el6.i686
--> Processing Dependency: libfreebl3.so(NSSRAWHASH_3.12.3) for package: glibc-2.12-1.192.el6.i686
---> Package glibc-devel.i686 0:2.12-1.192.el6 will be installed
--> Processing Dependency: glibc-headers = 2.12-1.192.el6 for package: glibc-devel-2.12-1.192.el6.i686
---> Package glibc-static.i686 0:2.12-1.192.el6 will be installed
--> Running transaction check
---> Package glibc-common.x86_64 0:2.12-1.166.el6_7.3 will be updated
--> Processing Dependency: glibc-common = 2.12-1.166.el6_7.3 for package: glibc-2.12-1.166.el6_7.3.x86_64
---> Package glibc-common.x86_64 0:2.12-1.192.el6 will be an update
--> Processing Dependency: tzdata >= 2015g-4 for package: glibc-common-2.12-1.192.el6.x86_64
---> Package glibc-headers.x86_64 0:2.12-1.166.el6_7.3 will be updated
--> Processing Dependency: glibc-headers = 2.12-1.166.el6_7.3 for package: glibc-devel-2.12-1.166.el6_7.3.x86_64
---> Package glibc-headers.x86_64 0:2.12-1.192.el6 will be an update
---> Package nss-softokn-freebl.i686 0:3.14.3-23.el6_7 will be installed
--> Running transaction check
---> Package glibc.x86_64 0:2.12-1.166.el6_7.3 will be updated
---> Package glibc.x86_64 0:2.12-1.192.el6 will be an update
---> Package glibc-devel.x86_64 0:2.12-1.166.el6_7.3 will be updated
---> Package glibc-devel.x86_64 0:2.12-1.192.el6 will be an update
```

---> Package tzdata.noarch 0:2015g-2.el6 will be updated  
---> Package tzdata.noarch 0:2016f-1.el6 will be an update  
--> Finished Dependency Resolution

## Dependencies Resolved

---

---

---

Package Repository	Arch Size	Version
-----------------------	--------------	---------

---

---

---

### Installing:

glibc	i686	2.12-1.192.el6
public_ol6_latest	4.4 M	
glibc-devel	i686	2.12-1.192.el6
public_ol6_latest	988 k	
glibc-static	i686	2.12-1.192.el6
public_ol6_latest	1.1 M	

### Installing for dependencies:

nss-softokn-freebl	i686	3.14.3-23.el6_7
public_ol6_latest	156 k	

### Updating for dependencies:

glibc	x86_64	2.12-1.192.el6
public_ol6_latest	3.8 M	
glibc-common	x86_64	2.12-1.192.el6
public_ol6_latest	14 M	
glibc-devel	x86_64	2.12-1.192.el6
public_ol6_latest	988 k	
glibc-headers	x86_64	2.12-1.192.el6
public_ol6_latest	617 k	
tzdata	noarch	2016f-1.el6
public_ol6_latest	451 k	

## Transaction Summary

---

---

=====  
Install 4 Package(s)

Upgrade 5 Package(s)

Total download size: 27 M

Downloading Packages:

(1/9): glibc-2.12-1.192.el6.i686.rpm  
| 4.4 MB 00:18

(2/9): glibc-2.12-1.192.el6.x86\_64.rpm  
| 3.8 MB 00:02

(3/9): glibc-common-2.12-1.192.el6.x86\_64.rpm  
| 14 MB 00:08

(4/9): glibc-devel-2.12-1.192.el6.i686.rpm  
| 988 kB 00:00

(5/9): glibc-devel-2.12-1.192.el6.x86\_64.rpm  
| 988 kB 00:00

(6/9): glibc-headers-2.12-1.192.el6.x86\_64.rpm  
| 617 kB 00:00

(7/9): glibc-static-2.12-1.192.el6.i686.rpm  
| 1.1 MB 00:01

(8/9): nss-softokn-freebl-3.14.3-23.el6\_7.i686.rpm  
| 156 kB 00:00

(9/9): tzdata-2016f-1.el6.noarch.rpm  
| 451 kB 00:00

-----  
-----  
Total  
kB/s | 27 MB 00:41

664

Running rpm\_check\_debug

Running Transaction Test

Transaction Test Succeeded

Running Transaction

Updating : tzdata-2016f-1.el6.noarch  
1/14

Updating : glibc-common-2.12-1.192.el6.x86\_64  
2/14

Updating : glibc-2.12-1.192.el6.x86\_64  
3/14

Updating : glibc-headers-2.12-1.192.el6.x86\_64  
4/14

Installing : glibc-2.12-1.192.el6.i686  
5/14

Installing : nss-softokn-freebl-3.14.3-23.el6\_7.i686  
6/14

Updating : glibc-devel-2.12-1.192.el6.x86\_64  
7/14

Installing : glibc-static-2.12-1.192.el6.i686  
8/14

Installing : glibc-devel-2.12-1.192.el6.i686  
9/14

Cleanup : glibc-devel-2.12-1.166.el6\_7.3.x86\_64  
10/14

Cleanup : glibc-headers-2.12-1.166.el6\_7.3.x86\_64  
11/14

Cleanup : glibc-common-2.12-1.166.el6\_7.3.x86\_64  
12/14

Cleanup : glibc-2.12-1.166.el6\_7.3.x86\_64  
13/14

Cleanup : tzdata-2015g-2.el6.noarch  
14/14

Verifying : nss-softokn-freebl-3.14.3-23.el6\_7.i686  
1/14

Verifying : glibc-devel-2.12-1.192.el6.x86\_64  
2/14

Verifying : glibc-headers-2.12-1.192.el6.x86\_64  
3/14

Verifying : glibc-static-2.12-1.192.el6.i686  
4/14

Verifying : glibc-devel-2.12-1.192.el6.i686  
5/14

Verifying : glibc-2.12-1.192.el6.i686  
6/14

Verifying : glibc-2.12-1.192.el6.x86\_64  
7/14

Verifying : glibc-common-2.12-1.192.el6.x86\_64  
8/14

Verifying : tzdata-2016f-1.el6.noarch  
9/14

Verifying : glibc-devel-2.12-1.166.el6\_7.3.x86\_64  
10/14

Verifying : glibc-headers-2.12-1.166.el6\_7.3.x86\_64  
11/14

Verifying : glibc-2.12-1.166.el6\_7.3.x86\_64  
12/14

Verifying : tzdata-2015g-2.el6.noarch  
13/14

Verifying : glibc-common-2.12-1.166.el6\_7.3.x86\_64  
14/14

Installed:

glibc.i686 0:2.12-1.192.el6                      glibc-devel.i686 0:2.12-1.192.el6  
glibc-static.i686 0:2.12-1.192.el6

Dependency Installed:

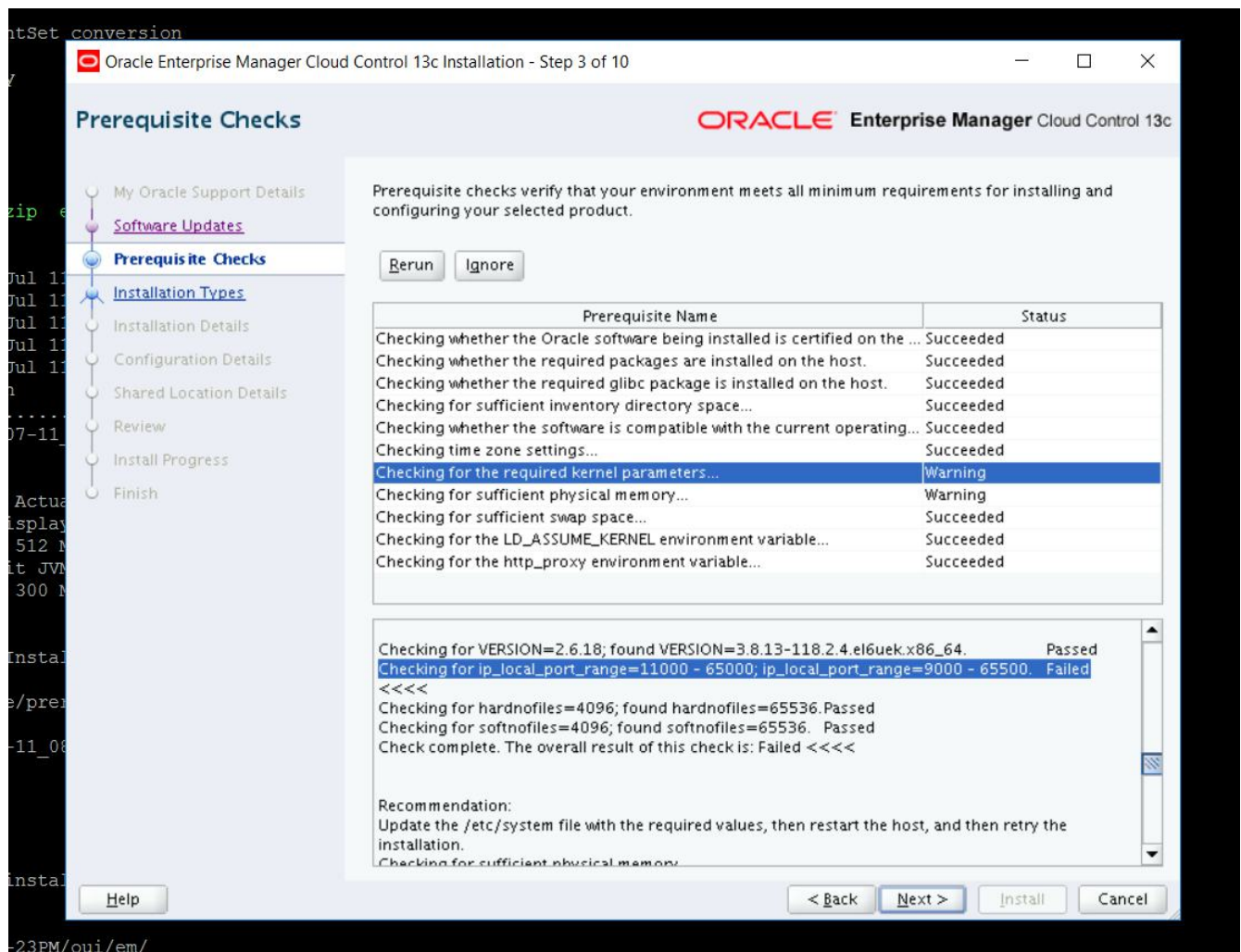
nss-softokn-freebl.i686 0:3.14.3-23.el6\_7

Dependency Updated:

glibc.x86\_64 0:2.12-1.192.el6   glibc-common.x86\_64 0:2.12-1.192.el6   glibc-devel.x86\_64 0:2.12-1.192.el6  
glibc-headers.x86\_64 0:2.12-1.192.el6   tzdata.noarch 0:2016f-1.el6

Complete!

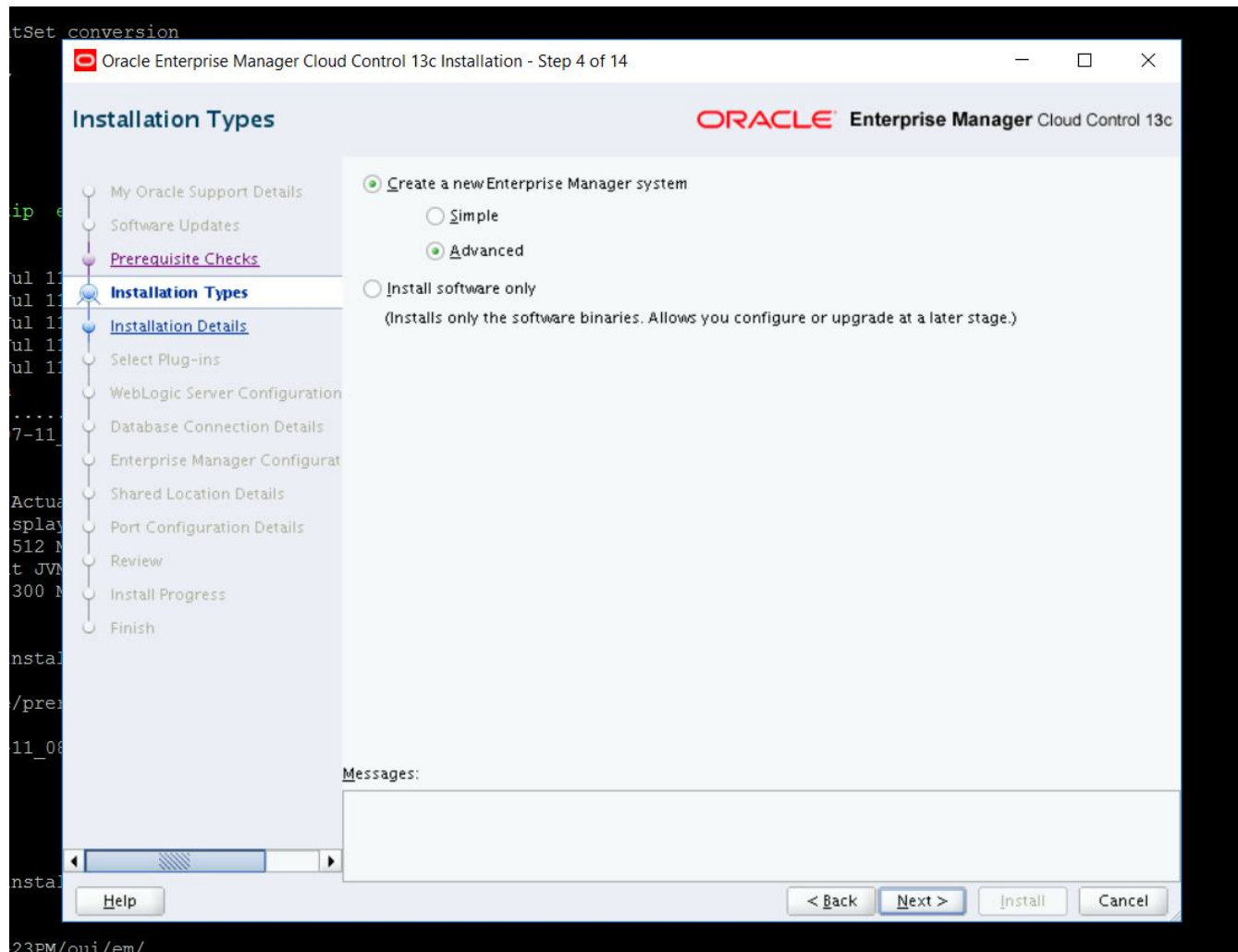




Checking for ip\_local\_port\_range=11000 - 65000; ip\_local\_port\_range=9000 - 65500. Failed

```
[root@srv1 ~]# echo "net.ipv4.ip_local_port_range = 9000 65500" >> /etc/sysctl.conf
[root@srv1 ~]# sysctl -p /etc/sysctl.conf
net.ipv4.ip_forward = 0
net.ipv4.conf.default.rp_filter = 1
net.ipv4.conf.default.accept_source_route = 0
kernel.sysrq = 0
kernel.core_uses_pid = 1
net.ipv4.tcp_syncookies = 1
kernel.msgmnb = 65536
kernel.msgmax = 65536
kernel.shmall = 4294967296
fs.file-max = 6815744
kernel.sem = 250 32000 100 128
kernel.shmmni = 4096
kernel.shmmax = 4398046511104
kernel.panic_on_oops = 1
net.core.rmem_default = 262144
```

net.core.rmem\_max = 4194304  
net.core.wmem\_default = 262144  
net.core.wmem\_max = 1048576  
fs.aio-max-nr = 1048576  
net.ipv4.ip\_local\_port\_range = 9000 65500  
net.ipv4.ip\_local\_port\_range = 9000 65500



x86\_64

## Installation Details

- My Oracle Support Details
- Software Updates
- Prerequisite Checks
- Installation Types
- Installation Details**
- Select Plug-ins
- WebLogic Server Configuration
- Database Connection Details
- Enterprise Manager Configuration
- Shared Location Details
- Port Configuration Details
- Review
- Install Progress
- Finish

Middleware Home Location

Agent Base directory

Host Name

Messages:

Help

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Next >

Install

Cancel

### Select Plug-ins

- My Oracle Support Details
- Software Updates
- Prerequisite Checks
- Installation Types
- Installation Details
- **Select Plug-ins**
- WebLogic Server Configuration
- Database Connection Details
- Enterprise Manager Configurat
- Shared Location Details
- Port Configuration Details
- Review
- Install Progress
- Finish

Plug-ins provide management capabilities tailored to specific types of targets or solution areas and typically have their own lifecycle independent of the Enterprise Manager core platform. Select the plug-ins you want to configure.

Select	Name	Version
<input checked="" type="checkbox"/>	Oracle Cloud Framework	13.1.1.0.0
<input checked="" type="checkbox"/>	Oracle Database	13.1.1.0.0
<input checked="" type="checkbox"/>	Oracle Exadata	13.1.1.0.0
<input checked="" type="checkbox"/>	Oracle Fusion Middleware	13.1.1.0.0
<input checked="" type="checkbox"/>	Systems Infrastructure	13.1.1.0.0
<input type="checkbox"/>	Apache Tomcat	13.1.1.0.0
<input type="checkbox"/>	IBM DBZ Database	12.1.0.4.0
<input type="checkbox"/>	Microsoft .Net Framework	13.1.1.0.0
<input type="checkbox"/>	Microsoft Active Directory	13.1.1.0.0
<input type="checkbox"/>	Microsoft IIS	13.1.1.0.0
<input type="checkbox"/>	Microsoft SQLServer Database	12.1.0.6.0
<input type="checkbox"/>	Oracle Audit Vault	12.1.0.4.0
<input type="checkbox"/>	Oracle Audit Vault and Database Firewall	13.1.1.0.0
<input type="checkbox"/>	Oracle Big Data Appliance	13.1.1.0.0
<input type="checkbox"/>	Oracle Cloud Application	13.1.1.0.0
<input type="checkbox"/>	Oracle Consolidation Planning and Chargeback	13.1.1.0.0
<input type="checkbox"/>	Oracle Engineered System Healthchecks	13.1.1.0.0
<input type="checkbox"/>	Oracle Fusion Applications	13.1.1.0.0
<input type="checkbox"/>	Oracle ORAchk Healthchecks	13.1.1.0.0
<input type="checkbox"/>	Oracle Siebel	13.1.1.0.0
<input type="checkbox"/>	Oracle Storage Management Framework	13.1.1.0.0
<input type="checkbox"/>	Oracle Virtual Infrastructure	13.1.1.0.0
<input type="checkbox"/>	Oracle Virtual Networking	12.1.0.2.0
<input type="checkbox"/>	Oracle Virtualization	13.1.1.0.0
<input type="checkbox"/>	Sybase ASE Database	12.1.0.4.0
<input type="checkbox"/>	Zero Data Loss Recovery Appliance	13.1.1.0.0

Help

< Back

Next >

Install

Cancel

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bit JVM

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/instal

8-23PM/oui/em/  
11-08-28 23PM

Oracle Enterprise Manager Cloud Control 13c Installation - Step 7 of 14

### WebLogic Server Configuration Details

ORACLE Enterprise Manager Cloud Control 13c

- My Oracle Support Details
- Software Updates
- Prerequisite Checks
- Installation Types
- Installation Details
- Select Plug-ins
- WebLogic Server Configuration**
- Database Connection Details
- Enterprise Manager Configuration
- Shared Location Details
- Port Configuration Details
- Review
- Install Progress
- Finish

WebLogic Domain Name: GCDomain

WebLogic User Name: weblogic

WebLogic Password: [REDACTED]

Confirm Password: [REDACTED]

Node Manager User Name: nodemanager

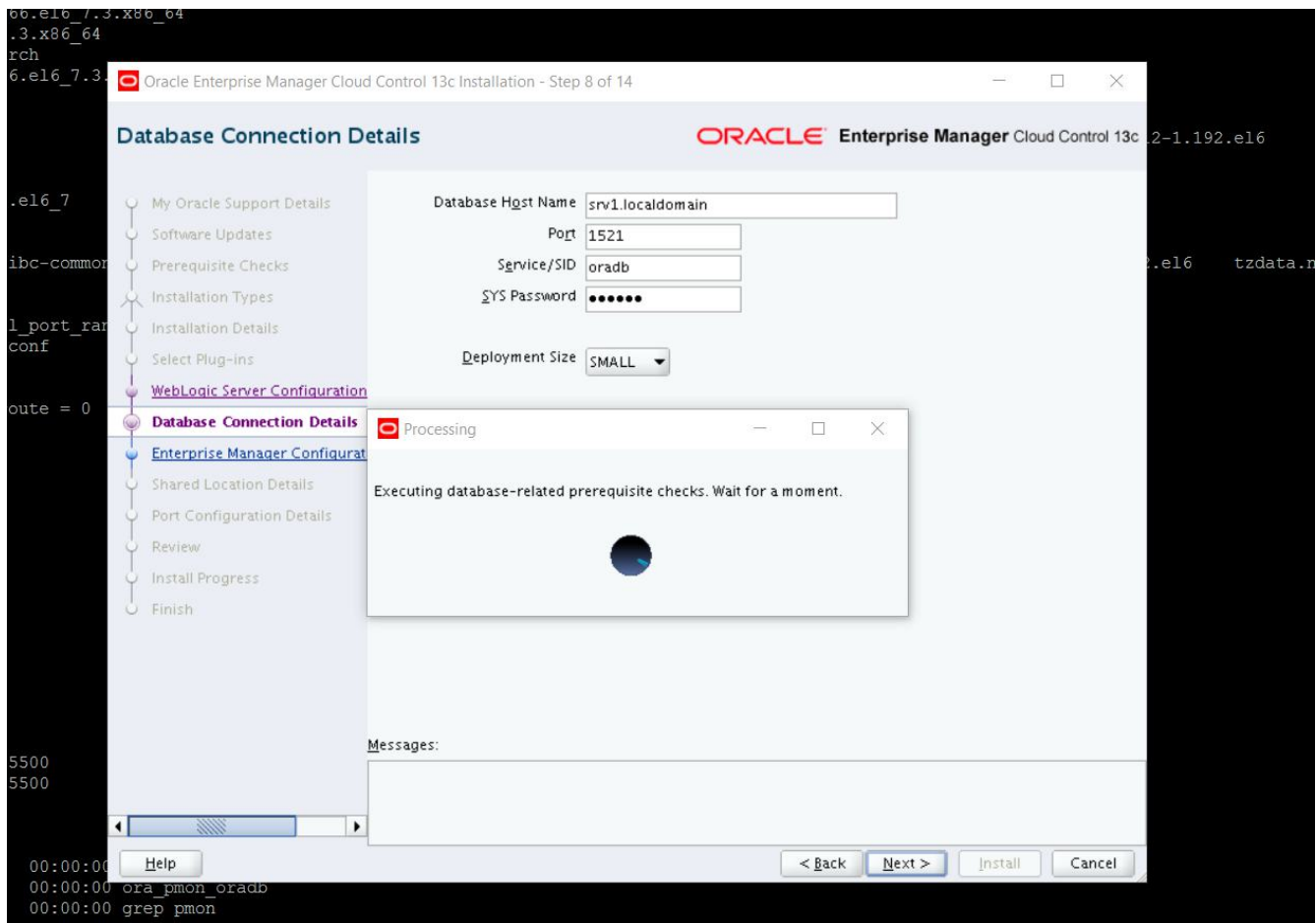
Node Manager Password: [REDACTED]

Confirm Password: [REDACTED]

OMS Instance Base Location: /u01/app/oracle/product/12.1.0/gc\_inst

Messages:

- WebLogic Password: Password must contain at least 8 characters, begin with a letter, and include at least one numeric value.
- Node Manager Password: Password must contain at least 8 characters, begin with a letter, and include at least one numeric value.



SQL> show parameter optimize

NAME	TYPE	VALUE
optimizer_adaptive_features	boolean	TRUE
optimizer_adaptive_reporting_only	boolean	FALSE
optimizer_capture_sql_plan_baselines	boolean	FALSE
optimizer_dynamic_sampling	integer	2
optimizer_features_enable	string	12.1.0.2
optimizer_index_caching	integer	0
optimizer_index_cost_adj	integer	100
optimizer_inmemory_aware	boolean	TRUE
optimizer_mode	string	ALL_ROWS
optimizer_secure_view_merging	boolean	TRUE
optimizer_use_invisible_indexes	boolean	FALSE

NAME	TYPE	VALUE
optimizer_use_pending_statistics	boolean	FALSE
optimizer_use_sql_plan_baselines	boolean	TRUE
plsql_optimize_level	integer	2

SQL> ALTER SYSTEM SET OPTIMIZER\_ADAPTIVE\_FEATURES=FALSE scope=both;

System altered.

SQL> show parameter optimize

NAME	TYPE	VALUE
optimizer_adaptive_features	boolean	FALSE
optimizer_adaptive_reporting_only	boolean	FALSE
optimizer_capture_sql_plan_baselines	boolean	FALSE
optimizer_dynamic_sampling	integer	2
optimizer_features_enable	string	12.1.0.2
optimizer_index_caching	integer	0
optimizer_index_cost_adj	integer	100
optimizer_inmemory_aware	boolean	TRUE
optimizer_mode	string	ALL_ROWS
optimizer_secure_view_merging	boolean	TRUE
optimizer_use_invisible_indexes	boolean	FALSE

NAME	TYPE	VALUE
optimizer_use_pending_statistics	boolean	FALSE
optimizer_use_sql_plan_baselines	boolean	TRUE
plsql_optimize_level	integer	2

SQL>

### Enterprise Manager Configuration Details

ORACLE Enterprise Manager Cloud Control 13c

- My Oracle Support Details
- Software Updates
- Prerequisite Checks
- Installation Types
- Installation Details
- Select Plug-ins
- WebLogic Server Configuration
- Database Connection Details
- Enterprise Manager Configuration**
- Shared Location Details
- Port Configuration Details
- Review
- Install Progress
- Finish

Create SYSMAN Password

Confirm Password

Agent Registration Password

Confirm Password

Management Tablespace

Configuration Data Tablespace

JVM Diagnostics Data Tablespace

Messages:

dir\_free\_MB Usable\_file\_MB Offline\_disks Voting\_files Name



## Enterprise Manager Shared Location Details

- My Oracle Support Details
- Software Updates
- Prerequisite Checks
- Installation Types
- Installation Details
- Select Plug-ins
- WebLogic Server Configuration
- Database Connection Details
- Enterprise Manager Configurat
- Shared Location Details**
- Port Configuration Details
- Review
- Install Progress
- Finish

Configure Oracle Software Library

Software Library Location

If you are planning to have a multi-OMS setup, then enter a shared location that is accessible from all the OMS instances.

Configure a Shared Location for Oracle BI Publisher

Config Volume

Cluster Volume

Sets up the shared storage for BI Publisher, in preparation for adding an OMS (which will also contain a scaled-out BI Publisher). Adding an OMS will also add a BI Publisher server that will function in a High Availability environment. Therefore, BI Publisher will support both redundancy and scalability.

Config volume contains the BI Publisher repository and configuration files.  
Cluster volume contains storage required for the BI Publisher scheduler to operate in a HA environment.

Enable BI Publisher

Enable Oracle BI Publisher

Messages:

## Port Configuration Details

- My Oracle Support Details
- Software Updates
- Prerequisite Checks
- Installation Types
- Installation Details
- Select Plug-ins
- WebLogic Server Configuration
- Database Connection Details
- Enterprise Manager Configurat
- Shared Location Details
- Port Configuration Details**
- Review
- Install Progress
- Finish

Configuration of the Enterprise Manager system requires the allocation of several ports to facilitate internal communication between system components and to provide access to the console through a browser. The following table contains the ports that will be allocated, along with the recommended port ranges, for each component. By default, the first available port in the specified port range has been chosen.

Component Name	Recommended Port Range	Port
Enterprise Manager Upload Http Port	4889-4898	4889
Enterprise Manager Upload Http SSL Port	1159,4899-4908	4903
OHS Http Port	9788,9751-9800	9788
BI Publisher Http Port	9701,9701-9750	9701
Enterprise Manager Central Console Http SSL Port	7799-7809	7802
Node Manager Http SSL Port	7401-7500	7403
BI Publisher Http SSL Port	9801,9801-9850	9803
OHS Http SSL Port	9899,9851-9900	9851
Managed Server Http Port	7201-7300	7202
Oracle Management Agent Port	3872,1830-1849	3872
Enterprise Manager Central Console Http Port	7788-7798	7788
Admin Server Http SSL Port	7101-7200	7102
Managed Server Http SSL Port	7301-7400	7301

Messages:

## Review

Review the information you have provided, and click Install to begin the installation process.

- Install a new Enterprise Manager system
  - Source: /home/em13cstage/products.xml
  - Disk Space
    - Available: 47.77GB
    - Required: 17.5 GB
  - Installation Location
    - Oracle Management Service Home: /u01/app/oracle/product/12.1.0/oem13c
    - Oracle Management Agent Home: /u01/app/oracle/product/12.1.0/agent13c/agent\_13.1.0
  - Database Information
    - Connect String: (DESCRIPTION=(ADDRESS\_LIST=(ADDRESS=(PROTOCOL=TCP)(HOST=svr1.1
    - Tablespace Information
      - Management Tablespace: +DATA/mgmt.dbf
      - Configuration Data Tablespace: +DATA/mgmt\_ecm\_depot1.dbf
      - JVM Diagnostics Data Tablespace: +DATA/mgmt\_deepdive.dbf
  - WebLogic Server Information
    - Domain Name: GCDomain
    - Node Manager User Name: nodemanager
    - WebLogic Server User Name: weblogic
  - Ports

Help

< Back

Next >

Install

Cancel


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-5.z  
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-2.z  
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-4.z  
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em13  
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4-bin  
4-2.z  
4-3.z  
4-4.z  
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16-07  
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all20  
i

### Installation Progress Details

ORACLE Enterprise Manager Cloud Control 13c

Progress   
Loading products list. Please wait.

Status	Step	Log Details
	Copy files	<a href="#">View Log</a>
	Configure	
	Run root scripts	