Prerequisites for Oracle FLEXCUBE Installer Oracle FLEXCUBE Investor Servicing Release 12.1.0.0.0 [October] [2015]



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1. Prerequisites for Oracle FLEXCUBE Investor Servicing Installer

1.1 Environment Setup

This section helps you to configure various Operating system parameters and the setting to be prepared before Starting the Oracle FLEXCUBE Investor Servicing installation. This chapter explains the various configurations that are required to be performed at OS and Application or DB serve level.

1.2 Operating System Supported for Database

Oracle FLEXCUBE Investor Servicing is supported on following operating systems:

| Component |
|-------------|
| HP Unix |
| IBM AIX |
| Sun Solaris |
| LINUX |
| Windows |

1.3 Operating System Prerequisite for Database Setup

Following are the main kernel and database initialization parameters that you need to setup as part of the environment.

1.3.1 Sun Solaris Kernel Parameters

| Kernel Parameter | Suggested Starting Value | Description |
|---------------------|--|---|
| SHMMAX | 4294967295 or 70% of physical memory (whichever is larger) | Maximum size of a single shared memory segment |
| SHMMIN | 1 | Minimum size of a single shared memory segment |
| SHMMNI | 100 | Maximum number of shared memory segments in entire system |



| Kernel Parameter | Suggested Starting Value | Description |
|---------------------|--|---|
| SHMSEG | 10 | Maximum number of shared memory segments one process can attach |
| SEMMNS | 2000 | Maximum number of semaphores in entire system |
| SEMMSL | 1000 | Maximum number of semaphores per set |
| SEMMNI | 100 | Maximum number of semaphore sets in entire system |
| Swap Space | Twice the physical memory present | |
| Patches | Verify as per Oracle's platform specific release notes | |

1.3.2 IBM AIX Kernel Parameters

Unlike other UNIX platforms, AIX does not have the ability to directly configure Kernel parameters. Instead, the AIX Kernel dynamically allocates and reallocates resources as they are needed, up to a predefined limit, making the traditional practice of tuning parameters unnecessary. The only tuneable Kernel parameter is 'maxuprc' (maximum number of processes per user ID) which can be modified via SMIT (AIX's menu-based system administration utility) or the command line utility.

| Swap Space | Twice the Physical memory present |
|------------|--|
| Patches | Verify as per Oracle's platform specific release notes |

1.3.3 HP UNIX Kernel Parameters

| Kernel Parameter | Suggested Starting Value | Description |
|---------------------|-----------------------------|---|
| aio_max_ops | 2048 | Maximum number of queued AIO ops |
| dbc_min_pct | 2 | Minimum percentage of system memory used for buffer cache |
| dbc_max_pct | ensure <= 128MB | Maximum percentage of system memory used for buffer cache |
| Fsasync | 0 | Asynchronous i/o on file systems |
| max_async_ports | 1024 | Maximum ports for asynchronous I/O operations |
| maxdsiz64 | 1Gb | Shadow process heap size |
| Maxfiles | 512 | Soft limit number of open files per process |



| maxfiles_limit | 1024 | Hard limit number of open files per process |
|----------------|--|--|
| Maxusers | no of Oracle connections+64 | Influences nproc, nfile, ninode and maxuprc |
| Maxuprc | maxusers*5 | Number of processes per user ID |
| nfile | use SAM formula | Open files system wide |
| Nflocks | >= (200 + (sum of db files)) | File locks system wide |
| Nproc | use SAM formula | Processes system wide |
| Shmmax | 4294967295 | Maximum size of a single shared memory segment |
| Swap Space | Twice the physical memory present | |
| Patches | Verify as per Oracle's platform specific release notes | |

1.3.4 <u>Linux Kernel Parameters</u>

| Kernel Parameters | Recommended Value | Description |
|------------------------------|-------------------|--|
| nproc (Soft) | 2047 | Shell Limits (/etc/security/limits.conf) |
| nproc (Hard) | 16384 | Shell Limits (/etc/security/limits.conf) |
| nofile (Soft) | 1024 | Shell Limits (/etc/security/limits.conf) |
| nofile (hard) | 65536 | Shell Limits (/etc/security/limits.conf) |
| fs.file-max | 6815744 | Kernel Parameter (/etc/sysctl.conf) |
| kernel.shmall | 2097152 | Kernel Parameter (/etc/sysctl.conf) |
| kernel.shmmax | 2147483648 | Kernel Parameter (/etc/sysctl.conf) |
| kernel.shmmni | 4096 | Kernel Parameter (/etc/sysctl.conf) |
| kernel.sem | 250 32000 100 128 | Kernel Parameter (/etc/sysctl.conf) |
| net.ipv4.ip_local_port_range | 9000 65500 | Kernel Parameter (/etc/sysctl.conf) |
| net.core.rmem_default | 262144 | Kernel Parameter (/etc/sysctl.conf) |
| net.core.rmem_max | 4194304 | Kernel Parameter (/etc/sysctl.conf) |
| net.core.wmem_default | 262144 | Kernel Parameter (/etc/sysctl.conf) |



| Kernel Parameters | Recommended Value | Description |
|---|---|--------------------------------------|
| net.core.wmem_max | 1048576 | Kernel Parameter (/etc/sysctl.conf) |
| SWAP Space RAM Between 1 GB and 2 GB Between 2 GB and 16 GB More than 16 GB | 1.5 times the size of RAM Equal to the size of RAM 16Gb | SWAP space requirement |
| Patches | Verify as per Oracle's platform specific release notes | http://support.oracle.com/ |

1.4 Database Setup

For Datable recommendations please refer the 1-7 section of FCIS Database Practices document.

1.5 **Application Servers**

Oracle FLEXCUBE is supported on the following Application servers

| Component |
|-----------|
| Weblogic |
| Websphere |

Application server needs to be configured to user JDK1.7.

| Component | Required for | Installation Details |
|-----------|------------------------------------|--|
| JDK1.7 | Oracle FLEXCUBE Installation | Download JDK and set it as the environmental variable JAVA_HOME and append PATH with {JAVA_HOME}\bin |

For weblogic server recommendations refer the Document at <u>Weblogic Recommendations</u> and for websphere refer the document at <u>Websphere Recommendations</u>.

1.5.1 Third-Party Applications

This section explains the steps which have to be followed before the actual installation of Oracle FLEXCUBE Investor Servicing Application; the following steps have to be followed for setting up additional applications using installer.

Refer the 'Prerequisite' chapter of <u>Security Guide</u> user manual for further information on enforcing security for web.



| For installing any third-party or pre-requests list is provided for generic information however for detailed steps refer vendor install page. | | |
|---|--|--|
| Oracle BPEL | This section explains the instructions for <u>setting up BPEL</u> and it also explains the steps for integrating with various external enterprise solutions. | |
| Oracle IPM | This section describes the steps for configuring Oracle IPM. | |
| Oracle Web Service Manager | This section describes the steps for configuring Oracle web service manager. It explains about a policy framework to manage and secure Web services consistently across organization. | |
| BIP Web Service Reports | This section explains the instructions for setting up BIPWebService Reports. It explains the process of setting up BIP Web Services Reports Server, deploying of reports, Creating Roles and Users in Oracle BI Publisher and setting up Server for Web Service Based BIP Reports. | |
| OBIEE Application | This section explains the detailed guidelines for OBIEE Metadata Repository Deployment. This explain the prerequisites required and also explains the steps for deploying in OBIEE10g and OBIEE 11g. | |
| Oracle Access Manager and LDAP | Oracle FLEXCUBE Investor Servicing supports single sign-on integration. The steps related to setting up the Oracle Access Manager and LDAP are covered in this section. | |
| Oracle Identity Manager | Oracle Identity Manager is an identity management product that automates user provisioning, identity administration, and password management, integrated in a comprehensive workflow engine. Steps related to configuring Oracle Identity Manager covered. | |

1.6 Client Browsers Settings

Following browsers are supported:

| Component | | |
|-----------------------------|--|--|
| Google Chrome | | |
| Microsoft Internet Explorer | | |
| Mozilla Firefox | | |
| Opera | | |
| Apple Safari | | |

1.7 <u>Installer Installation Pre-requisites</u>



| Component | Required for | Installation Details |
|--------------------------|--|--|
| JDK | Oracle FLEXCUBE Investor Servicing Installation | Download JDK and set it as the environmental variable JAVA_HOME and append PATH with {JAVA_HOME}\bin |
| Weblogic | Oracle FLEXCUBE Investor Servicing Installation | Installer home needs to be specified for using the Deployment feature of installer. |
| Oracle Client | Oracle FLEXCUBE Investor Servicing Installation | Oracle client is required to install database objects of Oracle FLEXCUBE Investor Servicing. |
| Environment Variables | Oracle FLEXCUBE Installation | Create environment variables as given below. NLS_LANG = AMERICAN_AMERICA.UTF8 JAVA_TOOL_OPTIONS = -Dfile.encoding=UTF8 |

Please use appropriate text editor to open the installer log file. If there are any issues in opening, close the installer and open the log file from log folder of installer. It's recommended to use notepad as default program for .log extension in windows operating system.





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