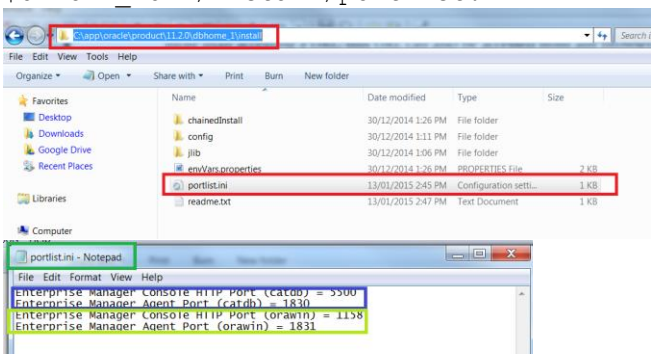
Oracle Enterprise Manager

Oracle Enterprise Manager Database Control is a graphical tool for managing one database, which may be a Real Application Clusters (RAC) clustered database. consist of a Java process running on the server machine, which listens for HTTP or HTTPS connection requests. Administrators connect to these processes from a browser. Database Control then connects to the local database server, the installation and configuration is done at database creation time. The configuration includes two vital bits of information: the `hostname` of the computer on which Database Control is running, and the `TCP port` on which it will be listening. If it is ever necessary to change either of these, Database Control will need to be reconfigured. To start Database Control, use the `emctl utility` located in the `$ORACLE_HOME/bin` directory. The three commands to start or stop Database Control and to check its status are

- `emctl start dbconsole`
- `emctl stop dbconsole`
- `emctl status dbconsole`

For these commands to work, three environment variables must be set: `PATH`, `ORACLE_HOME`, and `ORACLE_SID`. `PATH` is needed to allow the operating system to find the `emctl utility`. The `ORACLE_HOME` and `ORACLE_SID` are needed so that emctl can find the Database Control configuration files. These are in three places: the directory `$ORACLE_HOME/sysman/config` has general configuration directives that will apply to all Database Control instances running from the Oracle Home (one per database). The `ORACLE_HOME/hostname_sid/sysman/config` and a similarly named directory beneath `ORACLE_HOME/oc4j/j2ee` contain details for the Database Control that manages one particular database (`hostname` is the hostname of the machine, and `sid` is the value of the `ORACLE_SID` variable).

`$ORACLE_HOME/install/portlist.ini`

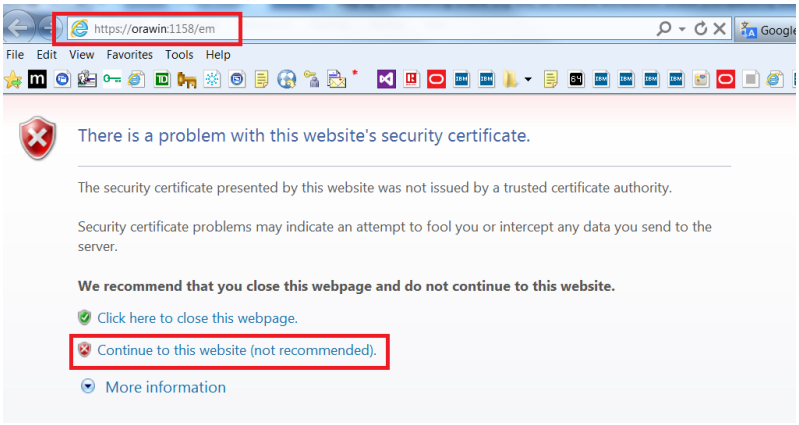



```
C:\>emctl status dbconsole
Oracle Enterprise Manager 11g Database Control Release 11.2.0.1.0
Copyright (c) 1996, 2010 Oracle Corporation.  All rights reserved.
https://orawin:1158/em/console/aboutApplication
Oracle Enterprise Manager 11g is running.
------------------------------------------------------------------
Logs are generated in directory C:\app\oracle\product\11.2.0\dbhome_1/orawin_orawin/sysman/log
```

```
C:\>emctl status agent
Oracle Enterprise Manager 11g Database Control Release 11.2.0.1.0
Copyright (c) 1996, 2010 Oracle Corporation.  All rights reserved.
---------------------------------------------------------------
Agent Version          : 10.2.0.4.2
OMS Version            : 10.2.0.4.2
Protocol Version       : 10.2.0.4.2
```

```
Agent Home             : C:\app\oracle\product\11.2.0\dbhome_1\orawin_orawin
Agent binaries : C:\app\oracle\product\11.2.0\dbhome_1
Agent Process ID       : 7972
Agent URL              : https://orawin:1831/emd/main
Repository URL : https://orawin:1158/em/upload/
Started at             : 2015-01-14 08:54:06
Started by user        : SYSTEM
Last Reload            : 2015-01-14 08:56:21
Last successful upload                                  : 2015-01-14 15:58:36
Total Megabytes of XML files uploaded so far :     8.63
Number of XML files pending upload                      :        0
Size of XML files pending upload(MB)                 :     0.00
Available disk space on upload filesystem            :    15.56%
Data channel upload directory : C:/app/oracle/product/11.2.0/dbhome_1/orawin_orawin/sysman/recv
Last successful heartbeat to OMS      : 2015-01-14 15:59:43
---------------------------------------------------------------
Agent is Running and Ready
```

Oracle EM use `512 bits RSA algorithm`, Microsoft IE cannot accept `public-key lenghts` less then 1024 bits



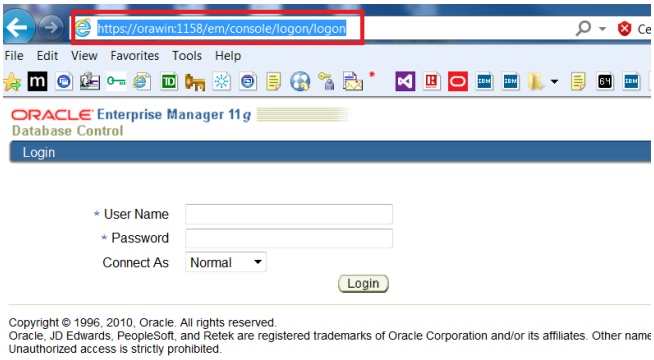
The strength of `public-key-based cryptographic algorithms` is determined by the time that it takes to derive the `private key` by using brute-force methods. The algorithm is considered to be strong enough when the time that it takes to derive private key is prohibitive enough by using the computing power at disposal. The threat landscape continues to evolve. Therefore, Microsoft is further hardening the criteria for the RSA algorithm with key lengths that are less than 1024 bits long.

After the update is applied, only certificate chains that are built by using `the CertGetCertificateChain` function are affected. The `CryptoAPI` builds a certificate trust chain and validates that chain by using time validity, certificate revocation, and certificate policies (such as intended purposes). The update implements an additional check to make sure that no certificate in the chain has an `RSA key length of less than 1024 bits`.

`MinRsaPubKeyBitLength` is a DWORD value that defines the minimum allowed RSA key length. By default, this value is not present, and the minimum allowed RSA key length is 1024. You can use certutil to set this value to 512 by running the following command:

```
certutil -setreg chain\minRSAPubKeyBitLength 512
```

All certutil commands shown in this article require local Administrator privileges because they are changing the registry. You can ignore the message that reads "The CertSvc service may have to be restarted for changes to take effect." That is not required for these commands because they do not affect the certificate service (CertSvc).



User Name: sys
Password: sys
Connect As: sysdba

Use EM to manage crs resource:

```
[root@Linux1 ~]# su - grid
[grid@Linux1 ~]$ crsctl add crs administrator -u grid
[grid@Linux1 ~]$ crsctl query crs administrator
```

CRS Administrator List: grid