



# PKI Certificate Expiry Reporter

## Overview

rev 1.1

*This utility simply reports the certificate expiry date, it does not validate certificates.*

1. This utility requires an LDIF file as input.

Providing a GUI utility which caters for all environments takes more development effort and is frankly unjustified considering there are already many tools available for collecting the required certificate data.

2. The LDIF file must contain objects of class "**nDSPKIKeyMaterial**" and attributes per object called "**NDSPKIPublicKeyCertificate**" (base64 encoded) AND "**hostServer**".

*(When an attribute name appears with "::<" after it, then it is base64 encoded.)*

3. Using a valid LDIF file as input, the PKI Key expiry date for each of the certificate objects will be extracted and reported.

4. The total number of years, months and days (independent of each other), remaining before expiry is calculated.

5. The results are written to a text report as well as a CSV (comma delimited file) in the format:

Object Name , Context , Date Trusted Root Expires , Date Public Key Expires , Total Years Until PK Expires , Total Months Until PK Expires, Days Until PK Expires

6. A DOS batch file has been provided, the installation directory, to collect of the LDIF data using ice.exe, called "Export-PKData.bat". Copy this file from the installation directory, into the directory where the ice.exe resides, e.g. "C:\novell\consoleone\1.2\bin".

*Execute the batch file to see a list of the command line parameters required.*

Using ICE/Idapsearch/iManager/ConsoleOne, export the certificate data for all objects of class **nDSPKIKeyMaterial** along with the attributes **NDSPKIPublicKeyCertificate** and **hostServer**.

7. If a non-eDirectory LDIF file is used, then it must only contain ONE class / object type, the objects which hold the **NDSPKIPublicKeyCertificate** or equivalent attribute. Use the Attribute Mapping feature to associate the attribute to the public key certificate. (See the menu option.)

### ICE Command:

```
ice -lice.log -SLDAP -s10.10.10.1 -p636 -k -t -d"cn=admin,o=novell" -wnovell  
-b "o=novell" -csub -Fobjectclass=nDSPKIKeyMaterial  
-a NDSPKIPublicKeyCertificate,hostServer -DLLDIF -fc:\certdata.txt
```

### Idapsearch Command:

```
ldapsearch -x -D"cn=admin,o=novell" -wnovell -h192.168.16.10 -b "o=novell"  
-s sub "objectclass=nDSPKIKeyMaterial" "NDSPKIPublicKeyCertificate,hostServer"  
> c:\certsdata.txt
```

**The utility has not been tested using WINE on Linux:** Some additional DLLs, not provided in the installer, would be required for this tool to run on Linux. There are also some small code changes which may be required. Even with the DLL's in place, problems may be encountered.

**Certificate Expiry Reporter - v1.2.3**

File Certificate Report View Output Folder About

Statistics

Total: 582    Good: 165    No host: 178    Specify Days Remaining: 30  
 Expired: 223    No Cert Attr: 16    Total certificates expiring soon: 15

Host Server	Days until Exp	Expiry Date	Certificate Object Name	eDirectory Context
BLR-DSBLASTER	9	2007-07-13	CN=TEST BLR-DSBLASTER - BLR-DSBLASTER	OU=ACMES,OU=BLR,OU=INDIA,0=MS
AGAC-IESLOW	11	2007-07-15	CN=IG AG 447243648 - AGAC-IESLOW	OU=SERVIBS,OU=SND,OU=ASIA-GAC,0=MS
AGAC-IESLOW	11	2007-07-15	CN=DNS AG AGAC-IESLOWAGACMSCOBL - AGAC-IESLOW	OU=SERVIBS,OU=SND,OU=ASIA-GAC,0=MS
AGAC-IESLOW	11	2007-07-15	CN=SSL BRTIEICATEIG - AGAC-IESLOW	OU=SERVIBS,OU=SND,OU=ASIA-GAC,0=MS
AGAC-IESLOW	11	2007-07-15	CN=SSL BRTIEICATEDNS - AGAC-IESLOW	OU=SERVIBS,OU=SND,OU=ASIA-GAC,0=MS
GRV-GRDD43	17	2007-07-21	CN=SSL BRTIEICATEDNS - GRV-GRDD43	OU=ACMES,OU=GRV,0=MS
GRV-GRDD43	17	2007-07-21	CN=SSL BRTIEICATEIG - GRV-GRDD43	OU=ACMES,OU=GRV,0=MS
GRV-ACTIVE4	18	2007-07-22	CN=SSL BRTIEICATEDNS - GRV-ACTIVE4	OU=ACMES,OU=GRV,0=MS
GRV-ACTIVE4	18	2007-07-22	CN=SSL BRTIEICATEIG - GRV-ACTIVE4	OU=ACMES,OU=GRV,0=MS
GRV-ACTIVE2	18	2007-07-22	CN=SSL BRTIEICATEDNS - GRV-ACTIVE2	OU=ACMES,OU=DEV,0=MS
GRV-ACTIVE2	18	2007-07-22	CN=SSL BRTIEICATEIG - GRV-ACTIVE2	OU=ACMES,OU=DEV,0=MS
SLLIE	24	2007-07-28	CN=SSL BRTIEICATEDNS - SLLIE	OU=ACMES,OU=GRV,0=MS
SLLIE	24	2007-07-28	CN=DNS AG SLLIEGROVOMSCOBL - SLLIE	OU=ACMES,OU=GRV,0=MS
SLLIE	24	2007-07-28	CN=SSL BRTIEICATEIG - SLLIE	OU=ACMES,OU=GRV,0=MS
SLLIE	24	2007-07-28	CN=IG AG 437652458 - SLLIE	OU=ACMES,OU=GRV,0=MS

Specify LDIF File: C:\CertTestDate.log

The report results: C:\Certificate Dates.CSV  
 Statistics in Certificate Stats.log & Certificate Expiry Report.TXT

The use the utility to parse that LDIF file to get the expiry date results. These certificates have not yet expired. They are listed here based on the configurable **days remaining** value in the Statistics section.

**Certificate Expiry Reporter - v1.2.3**

File Certificate Report View Output Folder About

Statistics

Total: 582    Good: 165    No host: 178    Specify Days Remaining: 30  
 Expired: 223    No Cert Attr: 16    Total certificates expiring soon: 15

Host Server	Days since Exp	Expiry Date	Certificate Object Name	eDirectory Context
CGL-USERS2	3	2007-07-01	CN=IG AG 44727434 - CGL-USERS2	OU=SERVIBS,OU=CGL,OU=EBLEA,0=MS
CGL-USERS2	3	2007-07-01	CN=SSL BRTIEICATEIG - CGL-USERS2	OU=SERVIBS,OU=CGL,OU=EBLEA,0=MS
CGL-USERS2	3	2007-07-01	CN=DNS AG CGL-USERS2CGLMSCOBL - CGL-USERS2	OU=SERVIBS,OU=CGL,OU=EBLEA,0=MS
CGL-USERS2	3	2007-07-01	CN=SSL BRTIEICATEDNS - CGL-USERS2	OU=SERVIBS,OU=CGL,OU=EBLEA,0=MS
BURZAAN	6	2007-06-28	CN=SSL BRTIEICATEIG - BURZAAN	OU=SERVIBS,OU=SND,OU=ASIA-GAC,0=MS
BURZAAN	6	2007-06-28	CN=SSL BRTIEICATEDNS - BURZAAN	OU=SERVIBS,OU=SND,OU=ASIA-GAC,0=MS
TOK-DSBLASTER	10	2007-06-24	CN=SSL BRTIEICATEDNS - TOK-DSBLASTER	OU=SERVIBS,OU=TOK,OU=JAGAN,0=MS
TOK-DSBLASTER	10	2007-06-24	CN=SSL BRTIEICATEIG - TOK-DSBLASTER	OU=SERVIBS,OU=TOK,OU=JAGAN,0=MS
TOK-DSBLASTER	10	2007-06-24	CN=IG AG 4649948738 - TOK-DSBLASTER	OU=SERVIBS,OU=TOK,OU=JAGAN,0=MS
TOK-DSBLASTER	10	2007-06-24	CN=DNS AG INNERWEBJGMSOBL - TOK-DSBLASTER	OU=SERVIBS,OU=TOK,OU=JAGAN,0=MS
LOVEJON	31	2007-06-03	CN=SSL BRTIEICATEDNS - LOVEJON	OU=ACMES,OU=GRV,0=MS
LOVEJON	31	2007-06-03	CN=DNS AG LOVEJONGROVOMSCOBL - LOVEJON	OU=ACMES,OU=GRV,0=MS
LOVEJON	31	2007-06-03	CN=SSL BRTIEICATEIG - LOVEJON	OU=ACMES,OU=GRV,0=MS
LOVEJON	31	2007-06-03	CN=IG AG 4376524422 - LOVEJON	OU=ACMES,OU=GRV,0=MS
BLR-DSBLASTER	31	2007-06-03	CN=OLD2 SSL BRTIEICATEIG - BLR-DSBLASTER	OU=ACMES,OU=BLR,OU=INDIA,0=MS
BLR-DSBLASTER	31	2007-06-03	CN=IG AG 464994479 - BLR-DSBLASTER	OU=ACMES,OU=BLR,OU=INDIA,0=MS
BLR-DSBLASTER	31	2007-06-03	CN=DNS AG BLR-DSBLASTERBLRMSCOBL - BLR-DSBL...	OU=ACMES,OU=BLR,OU=INDIA,0=MS
GRV-DSBLASTER	48	2007-05-17	CN=OLD2 SSL BRTIEICATEDNS - GRV-DSBLASTER	OU=SERVIBS,OU=IS,OU=GRV,0=MS
GRV-DSBLASTER	48	2007-05-17	CN=OLD2 SSL BRTIEICATEIG - GRV-DSBLASTER	OU=SERVIBS,OU=IS,OU=GRV,0=MS
WAL-DHCG2	88	2007-04-07	CN=IG AG 464992453 - WAL-DHCG2	OU=SERVIBS,OU=WAL,OU=ABLERICA
WAL-DHCG2	88	2007-04-07	CN=DNS AG WAL-DHCG2WALMSCOBL - WAL-DHCG2	OU=SERVIBS,OU=WAL,OU=ABLERICA
TOK-CACHE	97	2007-03-29	CN=SSL BRTIEICATEIG - TOK-CACHE	OU=SERVIBS,OU=TOK,OU=JAGAN,0=MS
TOK-CACHE	97	2007-03-29	CN=SSL BRTIEICATEDNSZ - TOK-CACHE	OU=SERVIBS,OU=TOK,OU=JAGAN,0=MS
TOK-CACHE	102	2007-03-24	CN=IG AG 4649948759 - TOK-CACHE	OU=SERVIBS,OU=TOK,OU=JAGAN,0=MS
TOK-CACHE	102	2007-03-24	CN=DNS AG TOK-CACHEJGMSOBL - TOK-CACHE	OU=SERVIBS,OU=TOK,OU=JAGAN,0=MS
BENDER	117	2007-03-09	CN=IG AG 43765884 - BENDER	OU=DNSDHCG,OU=GRV,0=MS
BENDER	117	2007-03-09	CN=SSL BRTIEICATEIG - BENDER	OU=DNSDHCG,OU=GRV,0=MS
BENDER	117	2007-03-09	CN=DNS AG BENDERGROVOMSCOBL - BENDER	OU=DNSDHCG,OU=GRV,0=MS

Specify LDIF File: C:\CertTestDate.log

The report results: C:\Certificate Dates.CSV  
 Statistics in Certificate Stats.log & Certificate Expiry Report.TXT

These certificates have expired.

**Certificate Expiry Reporter - v1.2.3**

File Certificate Report View Output Folder About

Statistics

**Total: 582**    **Good: 165**    **No host: 178**    **Specify Days Remaining: 30**  
**Expired: 223**    **No Cert Attr: 16**    **Total certificates expiring soon: 15**

Expiring Soon    Expired    **Good**    Cert Hosts

Host Server	Days Remaining	Expiry Date	Certificate Object Name	eDirectory Context
BRU-USERS2	35	2007-08-08	CN=IG AG 44944356 - BRU-USERS2	OU=SERVIBS,OU=BRU,OU=EBLEA,C
BRU-USERS2	35	2007-08-08	CN=SSL BRTIEICATEIG - BRU-USERS2	OU=SERVIBS,OU=BRU,OU=EBLEA,C
BRU-USERS2	35	2007-08-08	CN=DNS AG BRU-USERS2BRUMSCOBL - BRU-USERS2	OU=SERVIBS,OU=BRU,OU=EBLEA,C
BRU-USERS2	35	2007-08-08	CN=SSL BRTIEICATEDNS - BRU-USERS2	OU=SERVIBS,OU=BRU,OU=EBLEA,C
AGAC-ES-C4	50	2007-08-23	CN=SSL BRTIEICATEIG - AGAC-ES-C4	OU=*SERVIBS,OU=SND,OU=ASIA-G
AGAC-ES-C4	50	2007-08-23	CN=SSL BRTIEICATEDNS - AGAC-ES-C4	OU=*SERVIBS,OU=SND,OU=ASIA-G
GRV-DEV47	52	2007-08-25	CN=SSL BRTIEICATEDNS - GRV-DEV47	OU=NSRD,OU=GRV,O=MS
GRV-DEV47	52	2007-08-25	CN=SSL BRTIEICATEIG - GRV-DEV47	OU=NSRD,OU=GRV,O=MS
GRV-DEV44	52	2007-08-25	CN=SSL BRTIEICATEDNS - GRV-DEV44	OU=ACMES,OU=DEV,O=MS
DORIS	57	2007-08-30	CN=SSL BRTIEICATEDNS - DORIS	OU=ACMES,OU=GRV,O=MS
DORIS	57	2007-08-30	CN=SSL BRTIEICATEIG - DORIS	OU=ACMES,OU=GRV,O=MS
GRV-GROBLIT	84	2007-09-26	CN=IG AG 4926444566 - GRV-GROBLIT	OU=DS,OU=DEV,O=MS
GRV-GROBLIT	84	2007-09-26	CN=SSL BRTIEICATEDNS - GRV-GROBLIT	OU=DS,OU=DEV,O=MS
BLR-UBLESH	88	2007-09-30	CN=SSL BRTIEICATEIG - BLR-UBLESH	OU=*ACMES,OU=BLR,OU=INDIA,O=
BLR-UBLESH	88	2007-09-30	CN=IG AG 46493458496 - BLR-UBLESH	OU=*ACMES,OU=BLR,OU=INDIA,O=
BLR-UBLESH	88	2007-09-30	CN=DNS AG BLR-UBLESH - BLR-UBLESH	OU=*ACMES,OU=BLR,OU=INDIA,O=
BLR-UBLESH	88	2007-09-30	CN=SSL BRTIEICATEDNS - BLR-UBLESH	OU=*ACMES,OU=BLR,OU=INDIA,O=
GRV-GROBLIT	91	2007-10-03	CN=IG AG 329444266 - GRV-GROBLIT	OU=DS,OU=DEV,O=MS
GRV-DEV4	92	2007-10-04	CN=SSL BRTIEICATEDNS - GRV-DEV4	OU=ACMES,OU=DEV,O=MS
GRV-DEV4	92	2007-10-04	CN=IG AG 4376588484 - GRV-DEV4	OU=ACMES,OU=DEV,O=MS
GRV-GROBLIT	94	2007-10-06	CN=IG AG 42824923867 - GRV-GROBLIT	OU=DS,OU=DEV,O=MS
GRV-GROBLIT	94	2007-10-06	CN=DNS AG GRV-GROBLIT - GRV-GROBLIT	OU=DS,OU=DEV,O=MS
GAR-USERS	127	2007-11-08	CN=OLD4 SSL BRTIEICATEIG - GAR-USERS	OU=SERVIBS,OU=GAR,OU=EBLEA,C
GAR-USERS	127	2007-11-08	CN=OLD4 SSL BRTIEICATEDNS - GAR-USERS	OU=SERVIBS,OU=GAR,OU=EBLEA,C
LOBLBERDO	135	2007-11-16	CN=SSL BRTIEICATEDNS - LOBLBERDO	OU=ACMES,OU=GRV,O=MS
LOBLBERDO	135	2007-11-16	CN=SSL BRTIEICATEIG - LOBLBERDO	OU=ACMES,OU=GRV,O=MS
GAR-USERS	142	2007-11-23	CN=SSL BRTIEICATEIG - GAR-USERS	OU=SERVIBS,OU=GAR,OU=EBLEA,C
GAR-USERS	142	2007-11-23	CN=SSL BRTIEICATEDNS - GAR-USERS	OU=SERVIBS,OU=GAR,OU=EBLEA,C

Specify LDIF File: C:\CertTestDate.log

The report results: C:\Certificate Dates.CSV  
 Statistics in Certificate Stats.log & Certificate Expiry Report.TXT

These certificates have not expired. The “Expiring soon” list and the “Good” list do not report the same certificates.

The “Good” list shows certificates with a longer expiry then the “Expiring Soon” list’s “Days Remaining” value.

**Certificate Expiry Reporter - v1.2.3**

File Certificate Report View Output Folder About

Statistics

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Expiring Soon    Expired    Good    Cert Hosts

<No Certificate Key Attribute>

```

CN=NETIDENTIITN - DUS-IS4,OU=IS,OU=DUS,OU=EBLEA,O=BLS
CN=NETIDENTIITN - DUS-USERS,OU=SERVIBS,OU=DUS,OU=EBLEA,O=BLS
CN=SSL BRTIEICATEIG - WAL-DHCG4,OU=SERVIBS,OU=WAL,OU=ABLERICAS,O=BLS
CN=SSL BRTIEICATEDNS - WAL-DHCG4,OU=SERVIBS,OU=WAL,OU=ABLERICAS,O=BLS
CN=IC AG 464992452 - WAL-DHCG4,OU=SERVIBS,OU=WAL,OU=ABLERICAS,O=BLS
CN=DNS AG WAL-DHCG4WALBLSCOBL - WAL-DHCG4,OU=SERVIBS,OU=WAL,OU=ABLERICAS,O=BLS
CN=SSL BRTIEICATEIG - WAL-DHCG2,OU=SERVIBS,OU=WAL,OU=ABLERICAS,O=BLS
CN=SSL BRTIEICATEDNS - WAL-DHCG2,OU=SERVIBS,OU=WAL,OU=ABLERICAS,O=BLS
CN=NETIDENTIITN - GRV-IGD-TOOLS,OU=ACBLES,OU=GRV,O=BLS
CN=SSL BRTIEICATEIG - GRV-COREDUBLG,OU=NTS,OU=GRV,O=BLS
CN=SSL BRTIEICATEIG - GRV-IT,OU=ACBLES,OU=GRV,O=BLS
CN=SSL BRTIEICATEIG - AGAC-DSBLASTER,OU=*SERVIBS,OU=SND,OU=ASIA-GAC,O=BLS
CN=SSL BRTIEICATEIG - SIN-AGG4,OU=*SERVIBS,OU=SIN,OU=ASIA-GAC,O=BLS
CN=SSL BRTIEICATEIG - GRV-DEV44,OU=ACBLES,OU=DEV,O=BLS
CN=SSL BRTIEICATEDNS - HELER,OU=ACBLES,OU=DEV,O=BLS
CN=SSL BRTIEICATEDNS - BLR-BLAIL4,OU=*ACBLES,OU=BLR,OU=INDIA,O=BLS
  
```

<No Host Server Association>

<pre> CN=DNS AG GRV-DEV4-EGROVOBLSCOBL - GRV-DEV4 OU=ACMES,OU=DEV,O=MS   </pre>	[Exp: 2008-06-22]	[Days: 354]
<pre> CN=DNS AG GRV-DEV44GROVOBLSCOBL - GRV-DEV44 AGAC-DSBLASTER OU=*SERVIBS,OU=SND,OU=ASIA-GAC,O=BLS   </pre>	[Exp: 2005-05-14]	[Days: -781]
<pre> CN=MAASKBLO - AGAC-DSBLASTER   </pre>	[Exp: 2005-06-28]	[Days: -736]
<pre> CN=SSL BRTIEICATEDNS - AGAC-DSBLASTER   </pre>	[Exp: 2005-06-21]	[Days: -793]

Find Host:

Specify LDIF File:

The report results: C:\Certificate Dates.CSV  
 Statistics in Certificate Stats.log & Certificate Expiry Report.TXT

This is a certificate Host Server view, which also includes certificates with **no Host Server associated** with them or that are **missing the Certificate Key attribute**. (The certificate key attribute is used to determine the expiry date.)

When using the filter option “All”, “Expired” or “Good” the LDIF file will be re-read to only report on the required data.

The “**Find Host**” option is a case insensitive search for a Host Server by name. When located the certificates are automatically displayed for the host located.

## Mapping Attributes for non-eDirectory LDIF Files



The attribute mapping feature should theoretically make it possible to map a non-eDirectory public key certificate attribute to the attribute used to extract the expiry details. **This feature is untested.**



The attributes on the first object in the LDIF file are extracted and presented in drop-down lists for both the Public Key Certificate and the Host Server. Select the appropriate attribute, then Accept the changes.



*This utility is provided without warranty or claims.  
If you're not happy with it, keep searching...  
the perfect tool might be out there.*

