Java Update預設強制實施CRL檢查，以阻止NSP和訪客流

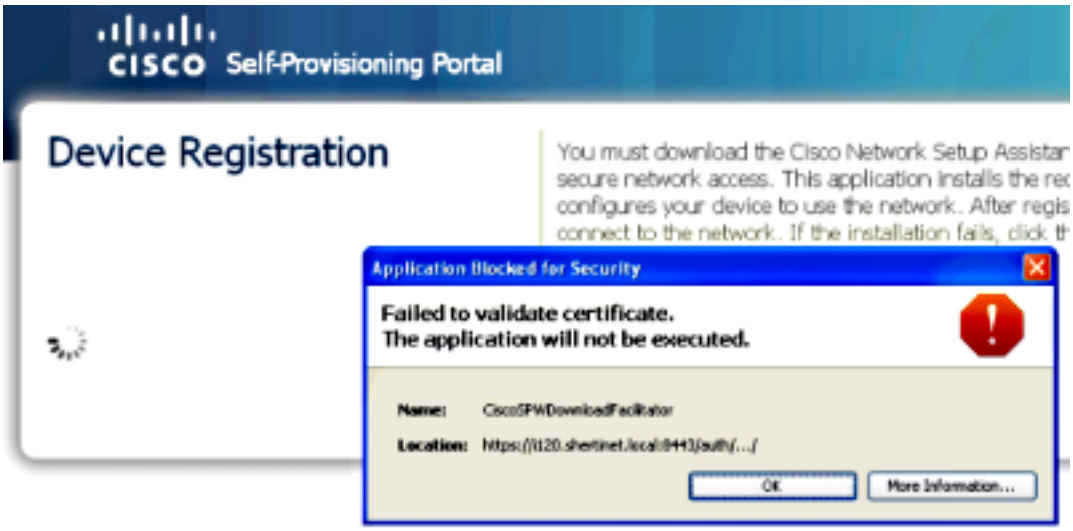
目錄

簡介

本文說明最新Java更新中斷請求方布建以及某些使用存取控制清單(ACL)和重新導向的訪客流量時遇到的問題。

背景資訊

該錯誤位於CiscoSPWDownloadFacilitator中，並顯示「驗證證書失敗。將不會執行應用程式。」



如果按一下「**More Information**」，便會收到投訴「Certificate Revocation List(CRL)」的輸出。

```
java.security.cert.CertificateException: java.security.cert.
CertPathValidatorException: java.io.IOException: DerInputStream.getLength():
lengthTag=127, too big.
at com.sun.deploy.security.RevocationChecker.checkOCSP(Unknown Source)
```

```
at com.sun.deploy.security.RevocationChecker.check(Unknown Source)
at com.sun.deploy.security.TrustDecider.checkRevocationStatus(Unknown Source)
at com.sun.deploy.security.TrustDecider.getValidationState(Unknown Source)
at com.sun.deploy.security.TrustDecider.validateChain(Unknown Source)
at com.sun.deploy.security.TrustDecider.isAllPermissionGranted(Unknown Source)
at sun.plugin2.applet.Plugin2ClassLoader.isTrustedByTrustDecider
(Unknown Source)
at sun.plugin2.applet.Plugin2ClassLoader.getTrustedCodeSources(Unknown Source)
at com.sun.deploy.security.CPCallbackHandler$ParentCallback.strategy
(Unknown Source)
at com.sun.deploy.security.CPCallbackHandler$ParentCallback.openClassPathElement
(Unknown Source)
at com.sun.deploy.security.DeployURLClassPath$JarLoader.getJarFile
(Unknown Source)
at com.sun.deploy.security.DeployURLClassPath$JarLoader.access$1000
(Unknown Source)
at com.sun.deploy.security.DeployURLClassPath$JarLoader$1.run(Unknown Source)
at java.security.AccessController.doPrivileged(Native Method)
at com.sun.deploy.security.DeployURLClassPath$JarLoader.ensureOpen
(Unknown Source)
at com.sun.deploy.security.DeployURLClassPath$JarLoader.<init>(Unknown Source)
at com.sun.deploy.security.DeployURLClassPath$3.run(Unknown Source)
at java.security.AccessController.doPrivileged(Native Method)
at com.sun.deploy.security.DeployURLClassPath.getLoader(Unknown Source)
at com.sun.deploy.security.DeployURLClassPath.getLoader(Unknown Source)
at com.sun.deploy.security.DeployURLClassPath.getResource(Unknown Source)
at sun.plugin2.applet.Plugin2ClassLoader$2.run(Unknown Source)
at java.security.AccessController.doPrivileged(Native Method)
at sun.plugin2.applet.Plugin2ClassLoader.findClassHelper(Unknown Source)
at sun.plugin2.applet.Applet2ClassLoader.findClass(Unknown Source)
at sun.plugin2.applet.Plugin2ClassLoader.loadClass0(Unknown Source)
at sun.plugin2.applet.Plugin2ClassLoader.loadClass(Unknown Source)
at sun.plugin2.applet.Plugin2ClassLoader.loadClass0(Unknown Source)
at sun.plugin2.applet.Plugin2ClassLoader.loadClass(Unknown Source)
at sun.plugin2.applet.Plugin2ClassLoader.loadClass(Unknown Source)
at java.lang.ClassLoader.loadClass(Unknown Source)
at sun.plugin2.applet.Plugin2ClassLoader.loadCode(Unknown Source)
at sun.plugin2.applet.Plugin2Manager.initAppletAdapter(Unknown Source)
at sun.plugin2.applet.Plugin2Manager$AppletExecutionRunnable.run(Unknown Source)
at java.lang.Thread.run(Unknown Source)
Suppressed: com.sun.deploy.security.RevocationChecker$StatusUnknownException
at com.sun.deploy.security.RevocationChecker.checkCRLs(Unknown Source)
... 34 more
Caused by: java.security.cert.CertPathValidatorException:
java.io.IOException: DerInputStream.getLength(): lengthTag=127, too big.
at sun.security.provider.certpath.OCSP.check(Unknown Source)
at sun.security.provider.certpath.OCSP.check(Unknown Source)
at sun.security.provider.certpath.OCSP.check(Unknown Source)
... 35 more
Caused by: java.io.IOException: DerInputStream.getLength(): lengthTag=127, too big.
at sun.security.util.DerInputStream.getLength(Unknown Source)
at sun.security.util.DerValue.init(Unknown Source)
at sun.security.util.DerValue.<init>(Unknown Source)
at sun.security.provider.certpath.OCSPResponse.<init>(Unknown Source)
... 38 more
```

問題

在最新版本的Java（版本7，更新25-2013年8月5日發佈）中，Oracle引入了一個新的預設設定，強制客戶端根據任何CRL或線上證書狀態協定(OCSP)驗證與任何applet關聯的證書。

思科與這些applet關聯的簽名證書具有列出的CRL和OCSP和Thawte。由於這項新變更，當Java使用者端嘗試連線至Thawte時，連線埠ACL和/或重新導向ACL會封鎖該使用者端。

在思科錯誤ID CSCui46739下追蹤此問題。

解決方案

選項1 — 交換機或無線控制器端修復

1. 重寫任何重定向或基於埠的ACL，以允許流量通過Thawte和Verisign。遺憾的是，此選項有一個限制，即無法從域名建立ACL。
2. 手動解析CRL清單，並將其放在重新導向ACL中。

附註：如果客戶端需要通過防火牆進行通訊，可能需要更新防火牆規則。

```
[user@user-linux logs]$ nslookup
>crl.thawte.com
Server:         64.102.6.247
Address:        64.102.6.247#53

Non-authoritative answer:
crl.thawte.com  canonical name = crl.ws.symantec.com.edgekey.net.
crl.ws.symantec.com.edgekey.net canonical name = e6845.ce.akamaiedge.net.
Name:   e6845.ce.akamaiedge.net
Address: 23.5.245.163

>ocsp.thawte.com
Server:         64.102.6.247
Address:        64.102.6.247#53

Non-authoritative answer:
ocsp.thawte.com canonical name = ocsp.verisign.net.
Name:   ocsp.verisign.net
Address: 199.7.48.72
```

如果這些DNS名稱發生變化且客戶端解析了其他內容，請使用更新的地址重寫重定向URL。

重新導向ACL範例：

```
     5 remark ISE IP address
10 deny ip any host X.X.X.X (467 matches)
15 remark crl.thawte.com
   20 deny ip any host 23.5.245.163 (22 matches)
25 remark ocsp.thawte.com
   30 deny ip any host 199.7.52.72
   40 deny udp any any eq domain (10 matches)
   50 permit tcp any any eq www (92 matches)
   60 permit tcp any any eq 443 (58 matches)
```

測試顯示OSCP和CRL URL解析為以下IP地址：

OCSP
199.7.48.72
199.7.51.72

199.7.52.72
199.7.55.72
199.7.54.72
199.7.57.72
199.7.59.72

CRL
23.4.53.163
23.5.245.163
23.13.165.163
23.60.133.163
23.61.69.163
23.61.181.163

這可能不是完整的清單，並且可能會根據地理位置而更改，因此需要進行測試來發現主機在每個例項中解析的IP地址。

選項2 — 客戶端修復

在Java控制面板的**Advanced**部分中，將**Perform certificate revocation checks on**設定為**Do not check（不推薦）**。

OSX:**系統首選項> Java**
高級
使用以下命令執行證書吊銷： 更改為「不檢查（不推薦）」

Windows:**控制面板> Java**
高級
使用以下命令執行證書吊銷： 更改為「不檢查（不推薦）」