

# 在ISE 3.3中配置受控應用程式重新啟動

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## 簡介

本文檔介紹如何為ISE 3.3中的管理員證書配置受控應用程式重新啟動。

## 必要條件

### 需求

思科建議您瞭解以下主題：

- ISE節點/角色
- ISE證書續訂/編輯/建立

### 採用元件

本文件中的資訊是以下列硬體與軟體版本為依據：

- 身分辨識服務引擎(ISE)軟體版本3.3
- 2節點部署

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路運作中，請確保您瞭解任何指令可能造成的影響。

## 背景資訊

在ISE中，當主管理節點(PAN)的管理證書更改時，部署中的所有節點都會重新載入，首先是PAN，然後是其餘節點，這會導致所有服務中斷。

當在任何其它節點中替換管理員證書時，唯一重新啟動的節點就是該單個節點。

ISE 3.3引入了一項新功能，允許您安排節點重新載入的時間。這樣可以更好地控制每個節點的重新啟動，並有助於避免中斷所有服務。

## 設定

更改PAN節點的管理員證書有以下不同選項：

- 建立證書簽名請求(CSR)並分配管理員角色。
- 導入證書、私鑰並分配管理員角色。
- 建立自簽名證書並分配管理員角色。

本檔案介紹使用CSR的方法。

### 步驟 1. 建立憑證簽署請求(CSR)

1. 在ISE上，導航到管理>系統>證書>證書簽名請求。
2. 按一下「Generate Certificate Signing Request (CSR)」。
3. 在使用情況中，選擇管理員。
4. 在節點中，選取主要管理節點。
5. 完成憑證資訊。
6. 按一下Generate。
7. 匯出檔案並使用有效的授權進行簽署。

Deployment    Licensing    **Certificates**    Logging    Maintenance    Upgrade    Health Checks

**Certificate Management** ▾

- System Certificates
- Admin Certificate Node Restart
- Trusted Certificates
- OCSP Client Profile
- Certificate Signing Requests**
- Certificate Periodic Check Se...

**Certificate Authority** >

**ISE Certificate Authority Certificates:**

- ISE Root CA - This is not a signing request, but an ability to generate a brand new Root C
- ISE Intermediate CA - This is an Intermediate CA Signing Request.
- Renew ISE OCSP Responder Certificates - This is not a signing request, but an ability to i

**Usage**

Certificate(s) will be used for **Admin** ▾

Allow Wildcard Certificates  ⓘ

**Node(s)**

Generate CSR's for these Nodes:

Node	CSR Friendly Name
<input type="checkbox"/> asc-ise33-1037	asc-ise33-1037#Admin
<input checked="" type="checkbox"/> ██████-ise-33-2	██████-ise-33-2#Admin

**Subject**

Common Name (CN)  
\$FQDN\$ ⓘ

---

Organizational Unit (OU) ⓘ

---

Organization (O)  
TAC ⓘ

CSR建立

## 步驟 2. 導入簽署CSR的根CA

1. 在ISE上，導航到管理>系統>證書>受信任的證書。
2. 按一下「Import」（匯入）。
3. 按一下Choose File並選擇Root CA certificate。
4. 寫一個好記的名稱。
5. 啟用覈取方塊：
  1. 信任ISE內的身份驗證。
  2. 信任思科服務的身份驗證。
6. 按一下Submit。

Deployment Licensing **Certificates** Logging Maintenance Upgrade Health Checks Backup & Restore Admin Access Settings

Certificate Management
 

- System Certificates
- Admin Certificate Node Restart
- Trusted Certificates**
- OCSP Client Profile
- Certificate Signing Requests
- Certificate Periodic Check Se...

Certificate Authority

### Import a new Certificate into the Certificate Store

\* Certificate File **Choose File** No file chosen

Friendly Name **Root-CA**

Trusted For:
 

- Trust for authentication within ISE
- Trust for client authentication and Syslog
- Trust for certificate based admin authentication
- Trust for authentication of Cisco Services
- Trust for Native IPsec certificate based authentication
- Validate Certificate Extensions

Description

**Submit** Cancel

導入根證書

### 步驟 3. 導入簽名的CSR

1. 在ISE上，導航到管理>系統>證書>證書簽名請求。
2. 選擇CSR並按一下Bind Certificate。
3. 按一下Choose file並選擇signed certificate。
4. 配置友好名稱。

Deployment Licensing **Certificates** Logging Maintenance Upgrade Health Checks Backup &

Certificate Management
 

- System Certificates
- Admin Certificate Node Restart
- Trusted Certificates
- OCSP Client Profile
- Certificate Signing Requests**
- Certificate Periodic Check Se...

Certificate Authority

## Certificate Signing Requests

**Generate Certificate Signing Requests (CSR)**

A Certificate Signing Requests (CSRs) must be sent to and signed by an external authority. Click "export" to download a signed request. After a request has been signed, click "bind" to bind the request to the signed certificate. Once bound, it will be removed from this list.

View Export Delete **Bind Certificate**

<input type="checkbox"/>	Friendly Name	Certificate Subject	Key Length	Pr...
<input checked="" type="checkbox"/>	<b>ise-33-2#Admin</b>	CN=ise-33-2.a...	4096	

繫結證書

Deployment Licensing **Certificates** Logging Maintenance Upgrade Health Checks Backup & Restore Admin Access

Certificate Management

- System Certificates
- Admin Certificate Node Restart
- Trusted Certificates
- OCSF Client Profile
- Certificate Signing Requests**
- Certificate Periodic Check Se...

Certificate Authority

### Bind CA Signed Certificate

\* Certificate File  signed.cer

Friendly Name

Validate Certificate Extensions

Usage

Admin: Use certificate to authenticate the ISE Admin Portal and DataConnect

### Deployment Nodes

Set Restart Time

<input type="checkbox"/>	Hostname	Personas	Role(s)	Services	Restart Time	Restart Status
<input type="checkbox"/>	asc-ise33-1037	Administration, Monit...	SECONDARY	SESSION,PROFILER	Not Configured	
<input type="checkbox"/>	asc-ise33-2	Administration, Monit...	PRIMARY	SESSION,PROFILER	Not Configured	

繫結證書

## 步驟 4. 配置重新啟動時間

1. 現在您可以看到一個新部分。您可以在此設定重新啟動程式。
2. 您可以為每個節點配置時間，也可以同時選擇兩個節點並應用相同的配置。
3. 選擇一個節點並按一下Set Restart Time。
4. 選擇日期、時間，然後按一下儲存。
5. 驗證時間，如果一切正確，請按一下Submit。

# Set Restart Time

## Scheduler

Restart Now  Restart Later

Set Date

27/09/2023

Set Time

11:00  PM

cancel

save

設定重新啟動時間

Deployment Licensing **Certificates** Logging Maintenance Upgrade Health Checks Backup & Restore Admin Access

Certificate Management

- System Certificates
- Admin Certificate Node Restart
- Trusted Certificates
- OCSP Client Profile
- Certificate Signing Requests
- Certificate Periodic Check Se...

Certificate Authority

### Bind CA Signed Certificate

\* Certificate File  signed.cer

Friendly Name  ⓘ

Validate Certificate Extensions  ⓘ

Usage

Admin: Use certificate to authenticate the ISE Admin Portal and DataConnect

### Deployment Nodes

<input type="checkbox"/>	Hostname	Personas	Role(s)	Services	Restart Time
<input checked="" type="checkbox"/>	asc-ise33-1037	Administration, Monit...	SECONDARY	SESSION,PROFILER	Wed Sep 27 2023 11:00PM
<input type="checkbox"/>	ise-33-2	Administration, Monit...	PRIMARY	SESSION,PROFILER	Wed Sep 27 2023 10:00PM

確認重新啟動時間

驗證

使用新頁籤時，請導航到管理>系統>證書>管理證書節點重新啟動。您可以驗證配置已完成，並在需要時進行更改。

要更改它，請按一下Set Restart Time或Restart Now。

Deployment Licensing **Certificates** Logging Maintenance Upgrade Health Checks Backup & Restore Admin Access Settings

Certificate Management  
System Certificates  
**Admin Certificate Node Rest...**  
Trusted Certificates  
OCSP Client Profile  
Certificate Signing Requests  
Certificate Periodic Check Se...

### Admin Certificate Node Restart

After you add or edit an admin usage certificate on the primary PAN, you must restart all the Cisco ISE nodes. In this window, you can schedule and monitor the status of the node restarts. If more than one node is configured for Restart Now, nodes will restart in sequence

Set Restart Time ⓘ Restart Now ⓘ All ▾

<input type="checkbox"/>	Hostname	Personas	Role(s)	Services	Restart Time	Restart Status
<input type="checkbox"/>	asc-ise33-1037	Administration, Monitorin...	SECONDARY	SESSION,PROFILER	Wed Sep 27 2023 10:00PM	Not Restarted
<input type="checkbox"/>	ise-33-2	Administration, Monitorin...	PRIMARY	SESSION,PROFILER	Wed Sep 27 2023 10:00PM	Not Restarted

驗證重新啟動狀態

您可以在流程期間驗證節點狀態。下一個影像是一個節點重新載入，另一個節點進行中的範例：

Certificate Management  
System Certificates  
**Admin Certificate Node Rest...**  
Trusted Certificates  
OCSP Client Profile  
Certificate Signing Requests  
Certificate Periodic Check Se...

### Admin Certificate Node Restart

After you add or edit an admin usage certificate on the primary PAN, you must restart all the Cisco ISE nodes. In this window, you can schedule and monitor the status of the node restarts. If more than one node is configured for Restart Now, nodes will restart in sequence

Set Restart Time ⓘ Restart Now ⓘ All ▾

<input type="checkbox"/>	Hostname	Personas	Role(s)	Services	Restart Time	Restart Status
<input type="checkbox"/>	ise-33-2	Administration, Monitorin...	PRIMARY	SESSION,PROFIL...	Wed Sep 27 2023 10:00PM	Restart success
<input type="checkbox"/>	asc-ise33-1037	Administration, Monitorin...	SECONDARY	SESSION,PROFIL...	Wed Sep 27 2023 10:00PM	Restart in progress

PAN已重新啟動

驗證更改並使用報告重新載入。

要檢查配置更改，請導航到操作>報告>報告>稽核>更改配置稽核。

Logged At	Administrator	Server	Interface	Object Type	Object Name	Event
Today	admin	Server		Object Type	Object Name	
2023-09-27 15:43:00.0...	admin	-ise-33-2	GUI	Admin Certificate Controlled Restart	asc-ise33-1037.aaame...	Changed configuration
2023-09-27 15:26:57.9...	admin	-ise-33-2	GUI	Admin Certificate Controlled Restart	asc-ise33-1037.aaame...	Added configuration
2023-09-27 15:26:57.5...	admin	-ise-33-2	GUI	CertificateBinding	BindCertificate	Added configuration
2023-09-27 14:38:01.6...	admin	-ise-33-2	GUI	Certificate Signing Request	-ise-33-2#Admin	Certificate has been exp...
2023-09-27 14:37:58.8...	admin	-ise-33-2	GUI	CertificateSigningRequest	CertificateSigningRequest	Added configuration

配置報告

要檢查重新啟動，請導航到操作>報告>報告>稽核>操作稽核。

Logged At	Administrator	Server	Interface	Object Type	Object Name	Event
2023-09-27 22:04:20.0...			CLI	Configuration-Changes		Added configuration
2023-09-27 22:04:20.0...			CLI	Configuration-Changes		Added configuration
2023-09-27 22:00:16.16	system	127.0.0.1	CLI	Process-Management	ISE process stopped	Application server stopped

重新啟動報告

\*\*\*-ise-33-2、ise-psc.log中的示例日誌：

<#root>

Configuration applied:

```
2023-09-27 15:26:12,109 INFO [DefaultQuartzScheduler_Worker-6][[]] admin.caservice.certmgmt.scheduler.
Restart is Not configured , Hence skipping restart status check for asc-ise33-1037
2023-09-27 15:26:57,775 INFO [admin-http-pool6][[]] cpm.admin.infra.action.RestartAction --:admin::-
adminCertRestartData received --{"items":[{"hostName":"asc-ise33-1037","restartTime":"2023-09-27:10:00PM"}
{"hostName":"***-ise-33-2","restartTime":"2023-09-27:10:00PM"}]}
```

Restart starts:

```
2023-09-27 21:59:11,952 INFO [DefaultQuartzScheduler_Worker-6][[]] admin.caservice.certmgmt.scheduler.
Executing AdminCertControlledRestartStatusJob [AdminCertControlledRestart[id=4af7d9c4-31d9-48e0-83dc-19
noderestartconfig=2023-09-27:10:00PM,noderestartstatus=Not Restarted,details=Not Restarted,maxdate=Thu
AdminCertControlledRestart[id=38b811df-03b5-4a64-87b6-363290b6b4ce,hostname=asc-ise33-1037,noderestartc
noderestartstatus=Not Restarted,details=Not Restarted,maxdate=Thu Oct 12 2023 14:43:01 GMT-0600 (hora e
2023-09-27 21:59:12,113 INFO [DefaultQuartzScheduler_Worker-6][[]] admin.caservice.certmgmt.scheduler.
Restart configured , proceeding to trackRestartStatus for ***-ise-33-2
2023-09-27 21:59:12,113 INFO [DefaultQuartzScheduler_Worker-6][[]] admin.caservice.certmgmt.scheduler.
Restart configured , proceeding to trackRestartStatus for asc-ise33-1037
```



```
2023-09-27 22:00:00,003 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Executing AdminCertControlledRestartSchedulerJob
2023-09-27 22:00:00,022 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Executing AdminCertControlledRestartSchedulerJob [AdminCertControlledRestart[id=4af7d9c4-31d9-48e0-83dc
noderestartconfig=2023-09-27:10:00PM,noderestartstatus=Not Restarted,details=Not Restarted,maxdate=Thu
AdminCertControlledRestart[id=38b811df-03b5-4a64-87b6-363290b6b4ce,hostname=asc-ise33-1037,noderestartc
noderestartstatus=Not Restarted,details=Not Restarted,maxdate=Thu Oct 12 2023 14:43:01 GMT-0600 (hora e
2023-09-27 22:00:00,288 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Restart failed or not restarted yet , hence preparing restart for ***-ise-33-2
2023-09-27 22:00:00,288 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Configured Date is now , hence proceeding for restart , for ***-ise-33-2
2023-09-27 22:00:00,288 INFO [DefaultQuartzScheduler_Worker-3][[]] cpm.infrastructure.certmgmt.api.Admini
updateRestartStatus updating restarted status
2023-09-27 22:00:00,288 INFO [DefaultQuartzScheduler_Worker-3][[]] cpm.infrastructure.certmgmt.api.Admini
Updating the data for node: ***-ise-33-2
2023-09-27 22:00:00,313 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Restart failed or not restarted yet , hence preparing restart for asc-ise33-1037
2023-09-27 22:00:00,313 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Configured Date is now , hence proceeding for restart , for asc-ise33-1037
2023-09-27 22:00:00,324 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
restartNowList : ***-ise-33-2.aaamexrub.com,asc-ise33-1037.aaamexrub.com
```

來自\*\*\*-ise-33-2 , restartutil.log的示例日誌 :

```
[main] Wed Sep 27 22:00:09 EST 2023:-----
[main] Wed Sep 27 22:00:09 EST 2023:RestartUtil: BEGIN - Restart called with args apponly:1377:***-ise-
[main] Wed Sep 27 22:00:09 EST 2023:-----
[main] Wed Sep 27 22:00:14 EST 2023:RestartUtil: Restarting Local node
[main] Wed Sep 27 22:00:14 EST 2023:[/usr/bin/sudo, /opt/CSC0cpm/bin/cpmcontrol.sh, restart_appserver_e
[main] Wed Sep 27 22:27:13 EST 2023:RestartUtil: Restarted local node and waiting for it to come up...
[main] Wed Sep 27 22:37:47 EST 2023:RestartUtil: Restart success for local node .
[main] Wed Sep 27 22:37:48 EST 2023:RestartUtil: Restarting node asc-ise33-1037.aaamexrub.com
[main] Wed Sep 27 22:37:54 EST 2023:RestartUtil: statusLine>>>HTTP/1.1 200
[main] Wed Sep 27 22:37:54 EST 2023:RestartUtil: Waiting for node asc-ise33-1037.aaamexrub.com to come
[main] Wed Sep 27 22:52:43 EST 2023:RestartUtil: Restart successful on node: asc-ise33-1037.aaamexrub.c
[main] Wed Sep 27 22:52:43 EST 2023:RestartUtil: cred file deleted
[main] Wed Sep 27 22:52:43 EST 2023:-----
[main] Wed Sep 27 22:52:43 EST 2023:RestartUtil:END- Restart called with args apponly:1377:***-ise-33-
[main] Wed Sep 27 22:52:43 EST 2023:-----
[main] Wed Sep 27 23:00:10 EST 2023: Usage RestartUtil local||remote apponly|full
```

來自asc-ise33-1037 , restartutil.log的示例日誌 :

```
main] Wed Sep 27 19:00:10 UTC 2023: Usage RestartUtil local||remote apponly|full
[main] Thu Sep 28 04:37:14 UTC 2023:-----
[main] Thu Sep 28 04:37:14 UTC 2023:RestartUtil: BEGIN - Restart called with args apponly:1377:localhos
[main] Thu Sep 28 04:37:14 UTC 2023:-----
[main] Thu Sep 28 04:37:16 UTC 2023:RestartUtil: Restarting Local node
[main] Thu Sep 28 04:37:16 UTC 2023:[/usr/bin/sudo, /opt/CSC0cpm/bin/cpmcontrol.sh, restart_appserver_e
[main] Thu Sep 28 04:52:41 UTC 2023:RestartUtil: Restarted local node and waiting for it to come up...
```

```
[main] Thu Sep 28 04:53:12 UTC 2023:RestartUtil: Restart success for local node .
[main] Thu Sep 28 04:53:12 UTC 2023:RestartUtil: cred file deleted
[main] Thu Sep 28 04:53:12 UTC 2023:-----
[main] Thu Sep 28 04:53:12 UTC 2023:RestartUtil:END- Restart called with args apponly:1377:localhost
[main] Thu Sep 28 04:53:12 UTC 2023:-----
```

## 疑難排解

若要檢查關於此功能的資訊，您可以檢查下列檔案：

- ise-psc.log
- restartutil.log

若要從指令行即時檢查它們，您可以使用下列指令：

```
show logging application restartutil.log tail
show logging application ise-psc.log tail
```

## 相關資訊

- [思科技術支援與下載](#)

## 關於此翻譯

思科已使用電腦和人工技術翻譯本文件，讓全世界的使用者能夠以自己的語言理解支援內容。請注意，即使是最佳機器翻譯，也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準確度概不負責，並建議一律查看原始英文文件（提供連結）。