

# 在ISE上安装补丁

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## 简介

本文档介绍在安装期间安装ISE补丁和常见问题的方法。

## 先决条件

### 要求

身份服务引擎(ISE)的基本知识。

### 使用的组件

本文档中的信息基于以下软件和硬件版本：

- 思科身份服务引擎 2.X

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您的网络处于活动状态，请确保您了解所有命令的潜在影响。

## 背景信息

思科会半定期发布ISE补丁。这些修补程序包含漏洞修复程序，并在必要时包含安全修复程序(例如，Heartbleed和Poodle使用SSL发现的漏洞)。

为了确保应用漏洞修复，需要插入安全漏洞，且解决方案能够无缝运行。

当您在ISE节点上安装补丁时，节点会重新启动。安装完成后，重新启动服务。请等待几分钟，然后再登录。

您可以在维护时段安排补丁安装，以避免临时中断。

仅安装适用于网络中部署的思科版本的补丁。思科会报告所有版本不匹配问题，以及补丁文件中的所有错误。

不能安装比当前安装在Cisco上的补丁版本低的补丁。同样，如果思科 ISE 当前安装的补丁版本较高，则无法回滚较低版本补丁引入的更改。


当您从 **Primary Administration Node (PAN)** 作为分布式部署的一部分，思科ISE在主要节点上安装补丁，然后在部署中的所有辅助节点上安装补丁。

如果补丁安装在 PAN 然后，思科ISE继续在辅助节点上安装补丁。如果OSPF在 PAN，安装不会继续到辅助节点。

但是，如果出于任何原因导致任一辅助节点上的安装失败，则系统仍会继续在部署中的下一个辅助节点上安装补丁。

当您从 PAN 作为双节点部署的一部分，思科会在主节点上安装补丁，然后在辅助节点上安装补丁。

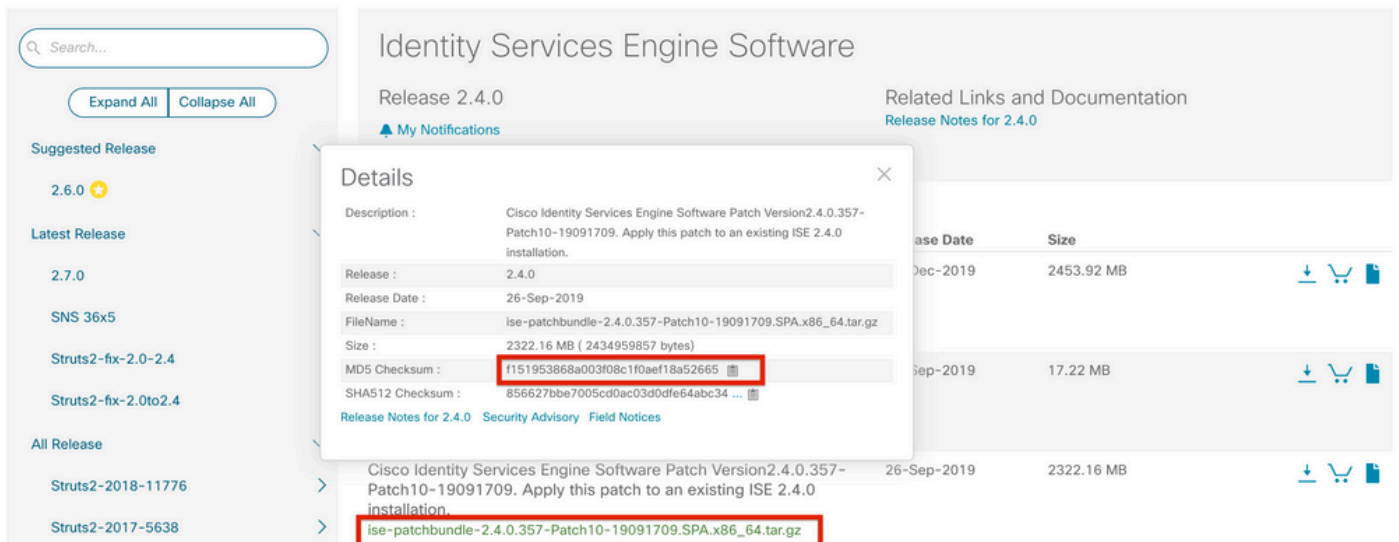
如果补丁安装在 PAN 然后，思科继续在辅助节点上安装补丁。如果OSPF在 PAN，安装不会继续到辅助节点。

 您必须获得超级管理员或系统管理员的身份以安装或回滚补丁。在修补程序安装开始之前，收集配置备份和操作备份。

## 使用GUI安装补丁

要从Cisco.com下载ISE补丁，请导航至 **Downloads > Products > Security > Access Control and Policy > Identity Services Engine > Identity Services Engine Software**, ([此处](#)。)

[Downloads Home](#) / [Security](#) / [Network Visibility and Segmentation](#) / [Identity Services Engine](#) / [Identity Services Engine Software](#) / [Identity Services Engine System Software - 2.4.0](#)





The screenshot shows the Cisco Identity Services Engine Software download page. A details modal is open for the patch bundle. The modal contains the following information:

Field	Value
Description	Cisco Identity Services Engine Software Patch Version2.4.0.357-Patch10-19091709. Apply this patch to an existing ISE 2.4.0 installation.
Release	2.4.0
Release Date	26-Sep-2019
FileName	ise-patchbundle-2.4.0.357-Patch10-19091709.SPA.x86_64.tar.gz
Size	2322.16 MB ( 2434959857 bytes)
MD5 Checksum	f151953868a003f08c1f0aef18a52665
SHA512 Checksum	856627bbe7005cd0ac03d0dfe64abc34

The MD5 and SHA512 checksums are highlighted with red boxes in the original image. Below the modal, a table lists the available patch bundles:

Release Date	Size	Download
Dec-2019	2453.92 MB	
Sep-2019	17.22 MB	
26-Sep-2019	2322.16 MB	

 注意: Cisco ISE 补丁通常累积，这意味着补丁 11 安装包括从补丁 1 到补丁 10 的所有补丁。补丁安装需要重新启动 ISE 服务器。

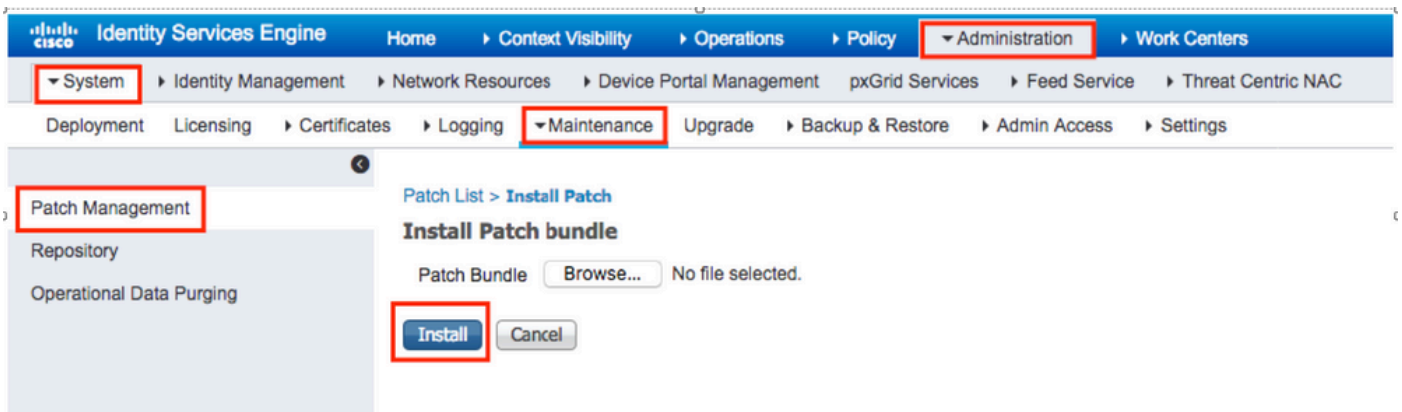
 注意：下载修补程序文件后验证 MD5/SHA512 校验和。

要在 ISE 上应用补丁，请登录 ISE Primary Administration Node (PAN) GUI 并执行下列说明：

步骤 1: 导航至 Administration > System > Maintenance > Patch Management > Install.

第二步：点击 Browse 并选择从 Cisco.com 下载的补丁文件。

步骤 3. 单击 Install 安装补丁程序。



## 使用 CLI 安装补丁

步骤 1: 配置 ISE 存储库并将所需的 ISE 补丁放入存储库中。如需配置 ISE 存储库，请参阅[如何在 ISE 上配置存储库](#)

第二步：使用 SSH 登录 ISE CLI。

第三步：确保 ISE CLI 可以列出存储库内容。

```
<#root>
```

```
ISE/admin# show repository FTP_repository
```

```
ise-patchbundle-10.2.0.7-Patch6-19021923.SPA.x86_64.tar.gz
```

```
ise-patchbundle-10.2.0.7-Patch9-19062923.SPA.x86_64.tar.gz
```

```
ise-patchbundle-10.1.0.0-Patch3-19110111.SPA.x86_64.tar.gz
```

第四步：要从 CLI 在特定 ISE 节点上安装补丁，请运行 `patch install` 命令。

```
Patch install
```

通过 SSH 登录到 ISE 节点的 CLI 并运行以下命令：

```
ISE/admin#patch install ise-patchbundle-10.1.0.0-Ptach3-19110111.SPA.x86_64.tar.gz FTP_repository
% Warning: Patch installs only on this node. Install with Primary Administration node GUI to install on
Save the current ADE-OS run configuration? (yes/no) [yes] ? yes
Generating configuration...
Saved the ADE-OS run Configuration to startup successfully
Initiating Application Patch installation...

Getting bundle to local machine...
Unbundling Application Package...
Verifying Application Signature...
patch successfully installed

% This application Install or Upgrade requires reboot, rebooting now...
Broadcast message from root@ISE (pts/1) (Fri Feb 14 01:06:21 2020):
Trying to stop processes gracefully. Reload lasts approximately 3 mins
Broadcast message from root@ISE (pts/1) (Fri Feb 14 01:06:21 2020):
Trying to stop processes gracefully. Reload takes approximately 3 mins
Broadcast message from root@ISE (pts/1) (Fri Feb 14 01:06:41 2020):
The system is going down for reboot NOW
Broadcast message from root@ISE (pts/1) (Fri Feb 14 01:06:41 2020):
The system is going down for reboot NOW
```

## 如何在部署中的所有ISE节点上安装补丁

当您从 PAN 作为分布式部署的一部分，思科ISE在主要节点上安装补丁，然后在部署中的所有辅助节点上安装补丁。

如果在主 PAN 上安装补丁成功，思科ISE之后会继续在辅助节点上安装补丁。如果OSPF在 PAN，安装不会继续到辅助节点。

但是，如果出于任何原因导致任一辅助节点上的安装失败，则系统仍会继续在部署中的下一个辅助节点上安装补丁。

## 如何在部署中的所有ISE节点上回滚补丁

要从部署中的思科ISE节点回滚补丁，您必须首先从 PAN.

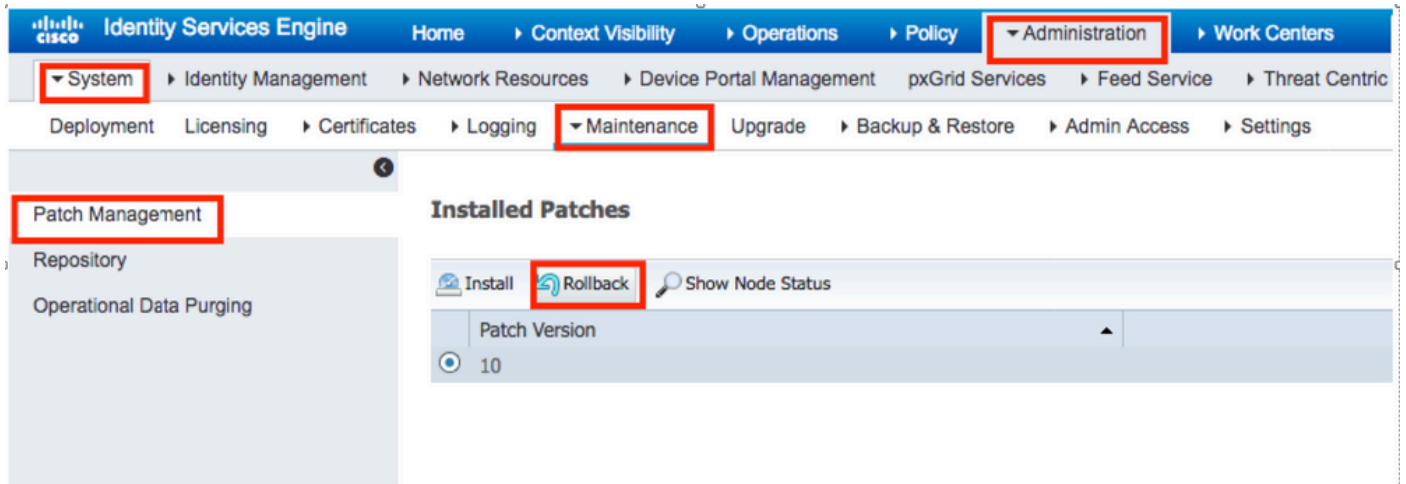
如果此操作成功，则系统会从辅助节点回滚补丁。如果回滚过程在 PAN，补丁不会从辅助节点回滚

。

但是，如果任一辅助节点上的补丁回滚失败，系统仍会从部署中的下一个辅助节点回滚补丁。

当Cisco ISE从辅助节点回滚补丁时，您可以继续从执行其他任务 PAN GUI.辅助节点在回滚后重新启动。

要回滚ISE补丁，请登录 ISE GUI 并导航至 Administration > System > Maintenance > Patch Management > 并选择所需的补丁并点击 Rollback,如所示：



## 如何从 ISE CLI 回滚补丁？

步骤1: 通过SSH连接到要删除补丁的ISE节点。

第二步：使用命令验证ISE节点上安装的补丁 Show Version

```
<#root>
```

```
ISE/admin# show version
```

```
Cisco Application Deployment Engine OS Release: 3.0
ADE-OS Build Version: 3.0.5.144
ADE-OS System Architecture: x86_64
Copyright (c) 2005-2019 by Cisco Systems, Inc.
All rights reserved.
Hostname: ISE
```

```
Version information of installed applications
```

```
-----
Cisco Identity Services Engine
```

```
-----
Version : 10.1.0.0
Build Date : Tue Feb 12 00:45:06 2019
Install Date : Mon Sep 30 12:17:29 2019
```

```
Cisco Identity Services Engine Patch
```

```
-----
```

Version : 1

Install Date : Tue Oct 01 01:30:12 2019

Cisco Identity Services Engine Patch

-----  
Version : 3

Install Date : Tue Mar 24 05:35:19 2020

第三步：运行命令 `patch remove <application name> <要移除的修补程序文件编号>`


例如：`patch remove ise 2`

```
ISE/admin# patch remove ise 3
Continue with application patch uninstall? [y/n] y
% Warning: Patch is removed only from this node. Remove patch with Primary Administration node GUI to r

Patch successfully uninstalled

% This application Install or Upgrade requires reboot, rebooting now...
Broadcast message from root@ISE (pts/1) (Sun Mar 8 03:16:29 2020):
Trying to stop processes gracefully. Reload takes approximately 3 mins
Broadcast message from root@ISE (pts/1) (Sun Mar 8 03:16:29 2020):
Trying to stop processes gracefully. Reload takes approximately 3 mins
Broadcast message from root@ISE (pts/1) (Sun Mar 8 03:17:41 2020):
The system is going down for reboot NOW
Broadcast message from root@ISE (pts/1) (Sun Mar 8 03:17:41 2020):
The system is going down for reboot NOW
```

---

 注意:ISE补丁在本质上是累积的，在存在较新版本时无法回滚。新版本需要首先回滚。

---

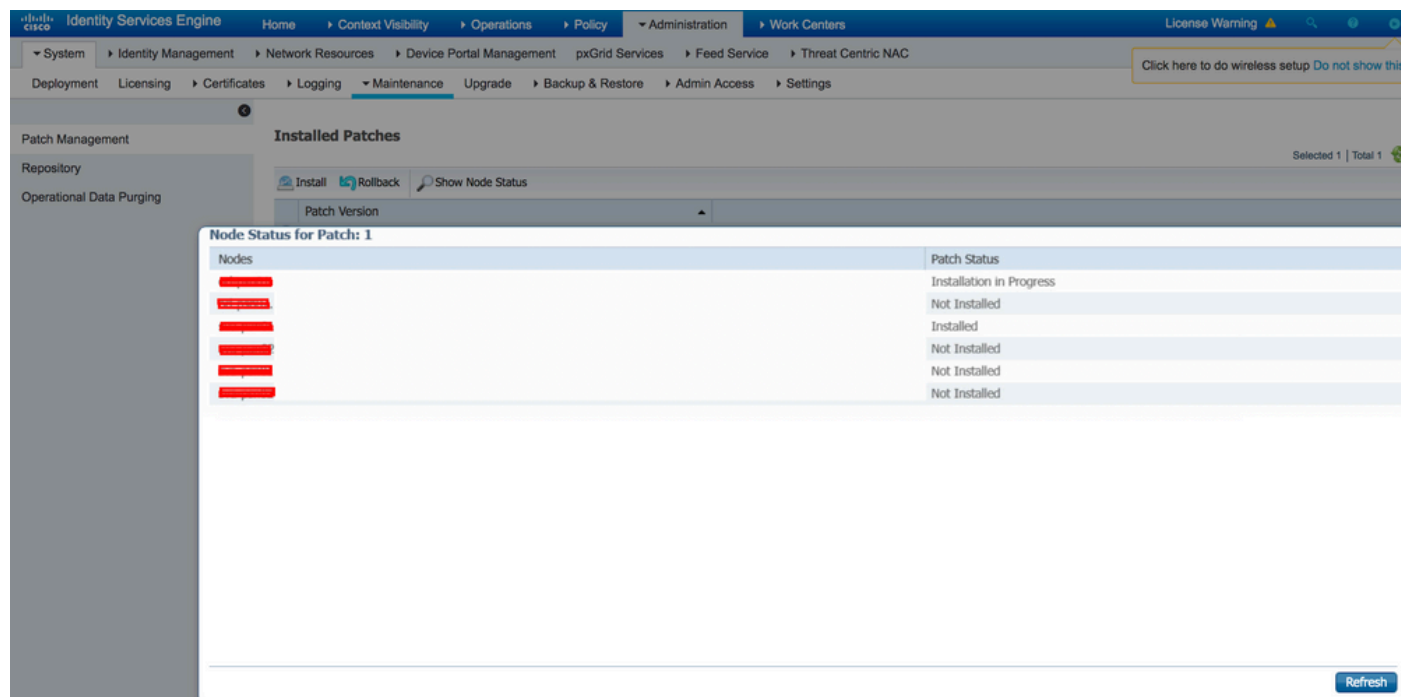
要卸载以前的修补程序，请先卸载最新的修补程序，然后卸载以前的修补程序版本。

```
ISE/admin#patch remove ise 1
Continue with application patch uninstall? [y/n] y
% Warning: Patch is removed only from this node. Remove patch with Primary Administration node GUI to r
Continue? (yes/no) [yes] ? yes
```

% Patch cannot be rolled back while a newer version exists, which needs to be rolled back first.

## 验证

要查看ISE补丁安装进度，请导航至 **Administration > System > Maintenance > Patch Management > Show Node Status** 如图所示：



从ISE节点验证补丁安装状态。登录到同一ISE服务器并运行命令 **Show Version**

```
ISE1/admin# show version
```

```
Cisco Application Deployment Engine OS Release: 3.0  
ADE-OS Build Version: 3.0.5.144  
ADE-OS System Architecture: x86_64
```

```
Copyright (c) 2005-2019 by Cisco Systems, Inc.  
All rights reserved.  
Hostname: ISE1
```

```
Version information of installed applications  
-----
```

```
Cisco Identity Services Engine  
-----  
Version : 10.1.0.0  
Build Date : Tue Feb 12 06:15:06 2019  
Install Date : Thu Nov 21 16:39:02 2019
```

```
Cisco Identity Services Engine Patch  
-----  
Version : 1  
Install Date : Thu Apr 02 11:00:08 2020
```

ISE1/admin#

验证ISE警报中成功和失败的修补程序消息：

Severity	Description	Count	Time
Warning	Queue Link Error	4646	4 mins ago
Error	Patch Failure	2	7 mins ago
Warning	Health Status Unavailable	415	8 mins ago
Warning	ISE Authentication Inactivity	1318	13 mins ago
Warning	Fewer VM licenses installed than VM nodes deployed	4	24 mins ago
Error	DNS Resolution Failure	504	24 mins ago
Info	Patch Success	1	24 mins ago
Error	ISE License expiring within 30 Days	42	25 mins ago
Error	Active Directory not joined	258	25 mins ago

## 成功的补丁安装日志参考

<#root>

isea/admin#

```
sh log system ade/ADE.log tail
```

```
2020-04-19T15:38:01.634794+05:30 isea ADEOSJAVAAPI[26999]: ADEAUDIT 2030, type=PATCH INSTALL, name=PATCH INSTALL STARTED
```

```
, username=kopriadm,
```

```
cause=Application patch install has been initiated
```

```
, adminipaddress=10.65.80.116,
```

```
interface=GUI,
```

```
detail=Patch Install initiated with bundle - ise-patchbundle-10.1.0.0-Patch3-19110111.SPA.x86_64.tar.gz
```

```
2020-04-19T15:38:01.635194+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
```

```
ise-patchbundle-10.1.0.0-Patch3-19110111.SPA.x86_64.tar.gz
```

```
, repo - tmplocalpatchinsta
```

```
llrepo
```

```
2020-04-19T15:38:01.784100+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
```

```
2020-04-19T15:38:01.827925+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
```

```
2020-04-19T15:38:01.829562+05:30 isea ADE-SERVICE[1158]: [26999]:[error] config:repository: rm_repos_cf
```

```
2020-04-19T15:38:01.830656+05:30 isea ADE-SERVICE[1158]: [26999]:[info] transfer: cars_xfer.c[66] [test
```

```
2020-04-19T15:38:02.873630+05:30 isea ADE-SERVICE[1158]: [26999]:[info] transfer: cars_xfer_util.c[2293
```

```
2020-04-19T15:38:03.247065+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
```



Got bundle at - /storeddata/Install/.1587290881/ise-patchbundle-10.1.0.0-Patch3-19110111.SPA.x86\_64.tar

```
2020-04-19T15:38:03.247424+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
2020-04-19T15:38:09.066295+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
2020-04-19T15:38:13.171615+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
d with release key
2020-04-19T15:38:18.816986+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
2020-04-19T15:38:18.877267+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
2020-04-19T15:38:18.877604+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
2020-04-19T15:38:18.878051+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
2020-04-19T15:38:18.878254+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install ci_util.c[3
2020-04-19T15:38:18.878517+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
2020-04-19T15:38:18.878712+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
2020-04-19T15:38:27.006433+05:30 isea ADE-SERVICE[1158]: [26999]:[info] application:install cars_instal
```

Executing patch install script patchinstall.sh from patch.zip

```
2020-04-19T15:38:27.209692+05:30 isea test: info:[patchinstall.sh] START PATCH INSTALL SCRIPT. PATCHDIR
2020-04-19T15:38:27.211274+05:30 isea test: info:[patchinstall.sh]
```

NEW PATCH VER: 3 PRIOR PATCH VER: 0

```
2020-04-19T15:38:27.213166+05:30 isea test: info:[patchinstall.sh] IRF-RABBITMQ-RUNTIME and IRF-CORE-EN
2020-04-19T15:38:27.214840+05:30 isea test: info:[patchinstall.sh] Remove IRF-Rabbitmq container
2020-04-19T15:38:27.753502+05:30 isea test: info:[patchinstall.sh] IRF-Rabbitmq container id -
2020-04-19T15:38:27.755172+05:30 isea test: info:[patchinstall.sh] No IRF-Rabbitmq container exist to r
2020-04-19T15:38:27.756631+05:30 isea test: info:[patchinstall.sh] Remove IRF-Core-Engine container
2020-04-19T15:38:27.781127+05:30 isea test: info:[patchinstall.sh] IRF-Core-Engine container id -
2020-04-19T15:38:27.783028+05:30 isea test: info:[patchinstall.sh] No IRF-Core-Engine container exist
2020-04-19T15:38:27.784724+05:30 isea test: info:[patchinstall.sh] IRF-RABBITMQ-RUNTIME and IRF-CORE-EN
2020-04-19T15:38:33.077501+05:30 isea test: info:[application:operation:cpmcontrol.sh] In Stop Monit
2020-04-19T15:38:33.197734+05:30 isea test: info:[application:operation:cpmcontrol.sh] Done Stop Monit
2020-04-19T15:38:34.289656+05:30 isea test: info:[application:operation:cpmcontrol.sh] Done Stop Monit
2020-04-19T15:38:34.671998+05:30 isea ADEOSShell[28278]: ADEAUDIT 2062, type=USER, name=M&T Log Process
2020-04-19T15:38:43.621160+05:30 isea test: info:[application:operation:adprobe.sh] adprobe:Stopping wm
2020-04-19T15:38:43.657769+05:30 isea test: info:[application:operation:adprobe.sh] adprobe:wmi probe i
2020-04-19T15:38:43.989085+05:30 isea test: info:[application:operation:syslogprobe.sh] syslogprobe:Sto
2020-04-19T15:38:44.019674+05:30 isea test: info:[application:operation:syslogprobe.sh] syslogprobe:sys
2020-04-19T15:38:44.367442+05:30 isea test: info:[application:operation:restprobe.sh] restprobe:Stoppin
2020-04-19T15:38:44.400103+05:30 isea test: info:[application:operation:restprobe.sh] restprobe:rest pr
2020-04-19T15:38:44.713844+05:30 isea test: info:[application:operation:agentprobe.sh] agentprobe:Stopp
2020-04-19T15:38:44.753547+05:30 isea test: info:[application:operation:agentprobe.sh] agentprobe:agent
2020-04-19T15:38:46.166418+05:30 isea test: info:[application:operation:appservercontrol.sh] Stopping I
2020-04-19T15:38:46.168374+05:30 isea ADEOSShell[29231]: ADEAUDIT 2062, type=USER, name=Application ser
```

interface=CLI, detail=Application server stopped

<#root>

```
2020-04-19T15:41:37.224949+05:30 isea test: info:[patchinstall.sh] ISE 10.1.0.0
```

patch 3 installFileSystem() INVOKED

```
2020-04-19T15:41:37.245321+05:30 isea test: info:[patchinstall.sh] Updating patched file: /storeddata/I
2020-04-19T15:41:37.251672+05:30 isea test: info:[patchinstall.sh] Updating patched file: /storeddata/I
2020-04-19T15:41:37.258874+05:30 isea test: info:[patchinstall.sh] Updating patched file: /storeddata/I
2020-04-19T15:41:37.265939+05:30 isea test: info:[patchinstall.sh] Updating patched file: /storeddata/I
2020-04-19T15:41:37.273866+05:30 isea test: info:[patchinstall.sh] Updating patched file: /storeddata/I
```

```
2020-04-19T15:41:37.280143+05:30 isea test: info:[patchinstall.sh] Updating patched file: /storeddata/I
2020-04-19T15:41:37.288008+05:30 isea test: info:[patchinstall.sh] Updating patched file: /storeddata/I
2020-04-19T15:41:37.295128+05:30 isea test: info:[patchinstall.sh] Updating patched file: /storeddata/I
2020-04-19T15:41:37.302031+05:30 isea test: info:[patchinstall.sh] Updating patched file: /storeddata/I
2020-04-19T15:41:37.308615+05:30 isea test: info:[patchinstall.sh] Updating patched file: /storeddata/I
.0-156.jar
```

<#root>

Broadcast message from root@isea (Sun Apr 19 15:50:40 2020):

**Trying to stop processes gracefully. Reload takes approximately 3 mins**

Broadcast message from root@isea (Sun Apr 19 15:51:01 2020):

The system is going down for reboot NOW

Session terminated, killing shell... ...killed.

## 关于此翻译

思科采用人工翻译与机器翻译相结合的方式将此文档翻译成不同语言，希望全球的用户都能通过各自的语言得到支持性的内容。

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