从ISE导出配置和操作数据备份

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简介

本文档介绍如何对身份服务引擎(ISE)进行按需配置数据和操作数据备份。

先决条件

要求

Cisco 建议您了解以下主题：

- 身份服务引擎(ISE)的基本知识。
- 如何配置存储库。

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2.7

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

确保环境中ISE可用性的另一个关键策略是制定可靠的备份策略。ISE备份有两种类型：配置备份和操作备份。

思科ISE允许您从主PAN和监控节点备份数据。可从CLI或用户界面进行备份。

配置数据 — 包含特定应用和Cisco ADE操作系统配置数据。备份可通过GUI或CLI通过主PAN完成。

运行数据 — 包含监控和故障排除数据。可以通过主PAN GUI或使用监控节点的CLI进行备份。

备份存储在存储库中，可以从同一存储库中恢复。您可以安排自动运行备份，也可以按需手动运行备份。您可以从GUI或CLI查看备份状态，但只能从CLI查看还原状态。

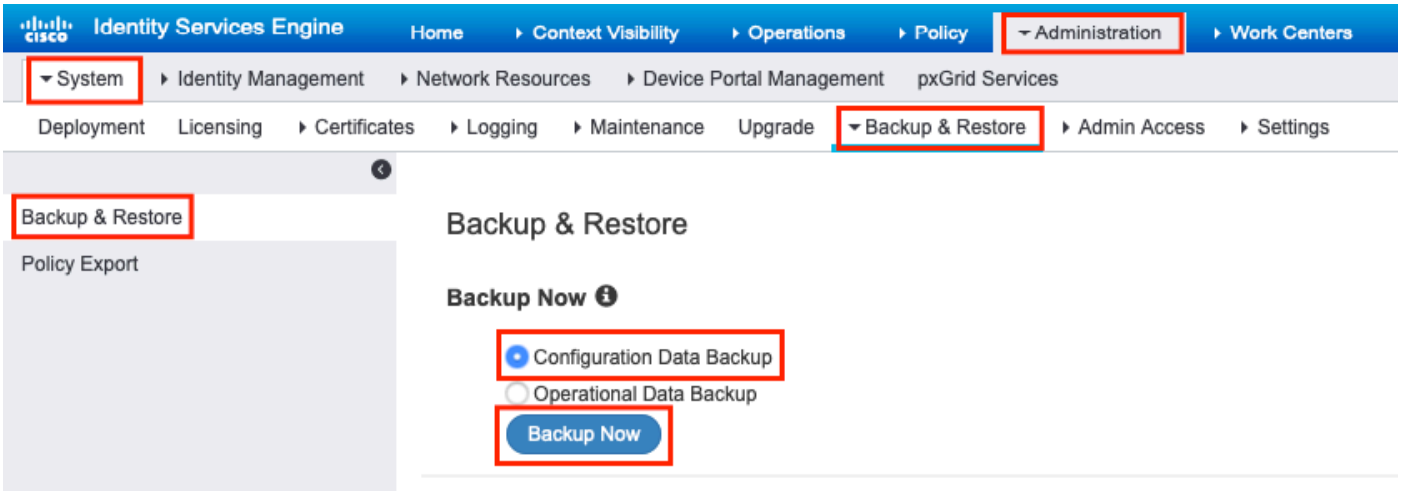
⚠ 警告：思科ISE不支持用于备份ISE数据的VMware快照。使用VMware快照或任何第三方备份来备份ISE数据会导致停止思科ISE服务。

配置

从GUI执行按需ISE配置数据备份

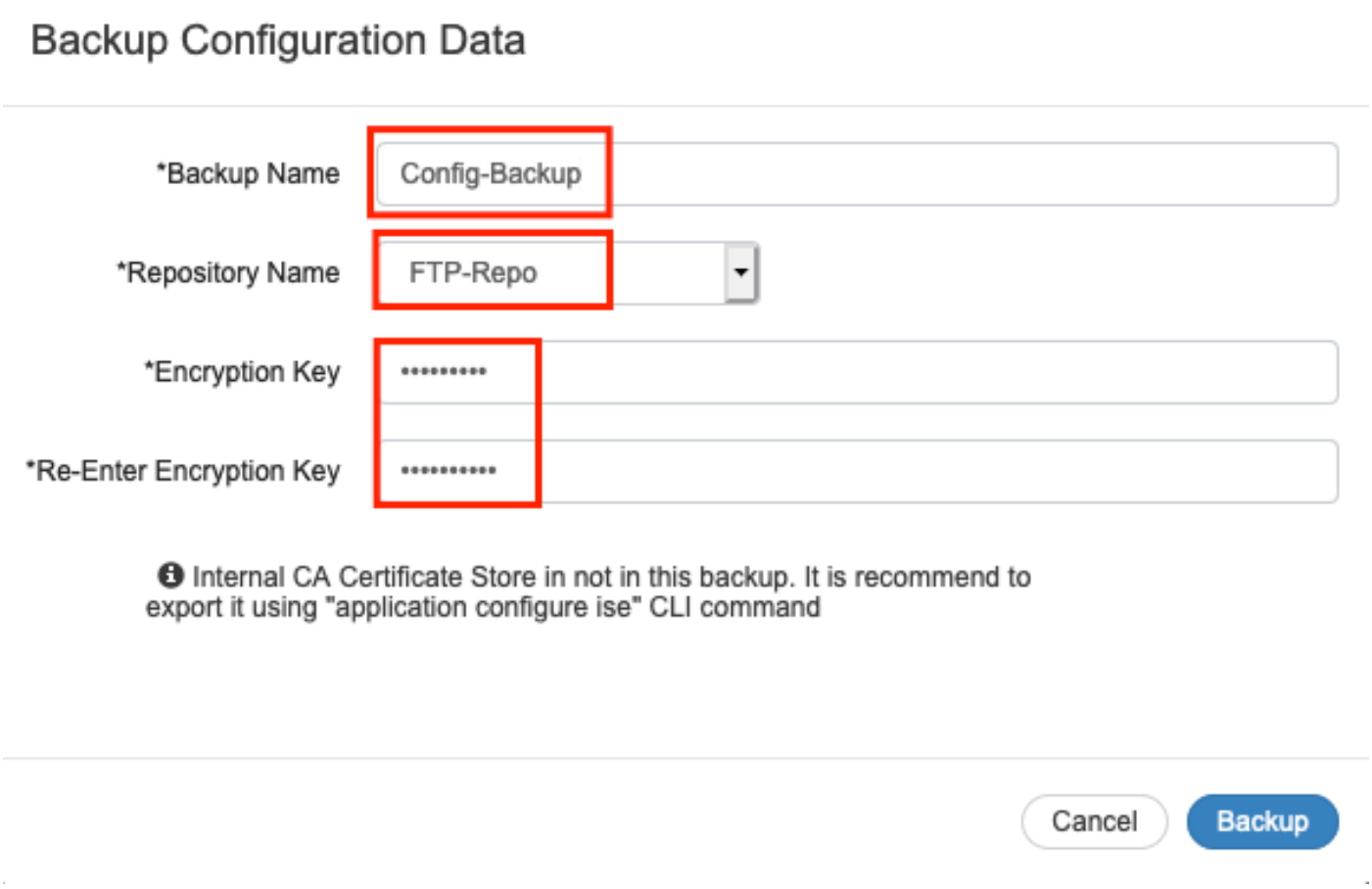
步骤1.配置存储库请参阅如何在ISE上配置存储库

第2步：登录ISE，导航到管理>系统>备份和恢复，选择配置数据备份，点击立即备份，如图所示：



步骤3.提供备份名称、存储库名称和加密密钥，然后单击Backup。

⚠ 提示：确保您记得加密密钥。



注意：ISE配置备份包含系统和受信任证书，并且不包含内部证书颁发机构(CA)证书。

从ISE CLI手动备份内部证书颁发机构(CA)存储。通过SSH登录到ISE主管理节点(PAN)节点并运行命令application configure ise > select option 7以导出内部CA存储。

<#root>

```
ise/admin#

application configure ise


Selection configuration option
[1]Reset M&T Session Database
[2]Rebuild M&T Unusable Indexes
[3]Purge M&T Operational Data
[4]Reset M&T Database
[5]Refresh Database Statistics
[6]Display Profiler Statistics

[7]Export Internal CA Store

[8]Import Internal CA Store
[9]Create Missing Config Indexes
[10]Create Missing M&T Indexes
[11]Enable/Disable ACS Migration
[12]Generate Daily KPM Stats
[13]Generate KPM Stats for last 8 Weeks
[14]Enable/Disable Counter Attribute Collection
```

```
[15]View Admin Users
[16]Get all Endpoints
[17]Enable/Disable Wifi Setup
[18]Reset Config Wifi Setup
[19]Establish Trust with controller
[20]Reset Context Visibility
[21]Synchronize Context Visibility With Database
[22]Generate Heap Dump
[23]Generate Thread Dump
[24]Force Backup Cancellation
[25]CleanUp ESR 5921 IOS Crash Info Files
[0]Exit
```

7

```
Export Repository Name:
```

FTP-Repo

```
Enter encryption-key for export:
Security Protocol list Start
Inside Session facade init
Old Memory Size : 7906192
Old Memory Size : 7906192
Export in progress...
Old Memory Size : 7906192

The next 5 CA key pairs were exported to repository 'FTP-Repo' at 'ise_ca_key_pairs_of_ise':
        Subject:CN=Certificate Services Root CA - ise
        Issuer:CN=Certificate Services Root CA - ise
        Serial#:0x08f06033-2a4c4fcc-b297e75a-04f11bf9

        Subject:CN=Certificate Services Node CA - ise
        Issuer:CN=Certificate Services Root CA - ise
        Serial#:0x3a0e8d8a-5a2846be-a902c280-b5d678aa

        Subject:CN=Certificate Services Endpoint Sub CA - ise
        Issuer:CN=Certificate Services Node CA - ise
        Serial#:0x33b14150-596c4552-ad0a9ab1-9541f0bb

        Subject:CN=Certificate Services Endpoint RA - ise
        Issuer:CN=Certificate Services Endpoint Sub CA - ise
        Serial#:0x37e17494-cf1d4372-bf0ba1e6-83653826

        Subject:CN=Certificate Services OCSP Responder - ise
        Issuer:CN=Certificate Services Node CA - ise
        Serial#:0x68a694ed-bc48481d-bc6cc58e-60a44a61
```

ise CA keys export completed successfully

从CLI执行按需ISE配置数据备份

步骤1.配置存储库请参阅如何在ISE上配置存储库

步骤2.登录到PAN节点的CLI并运行以下命令：

backup <backup file name> repository <repository name> ise-config encryption-key plain <encryption key>

<#root>

```
ise/admin#
backup ConfigBackup-CLI repository FTP-Repo ise-config encryption-key plain
```

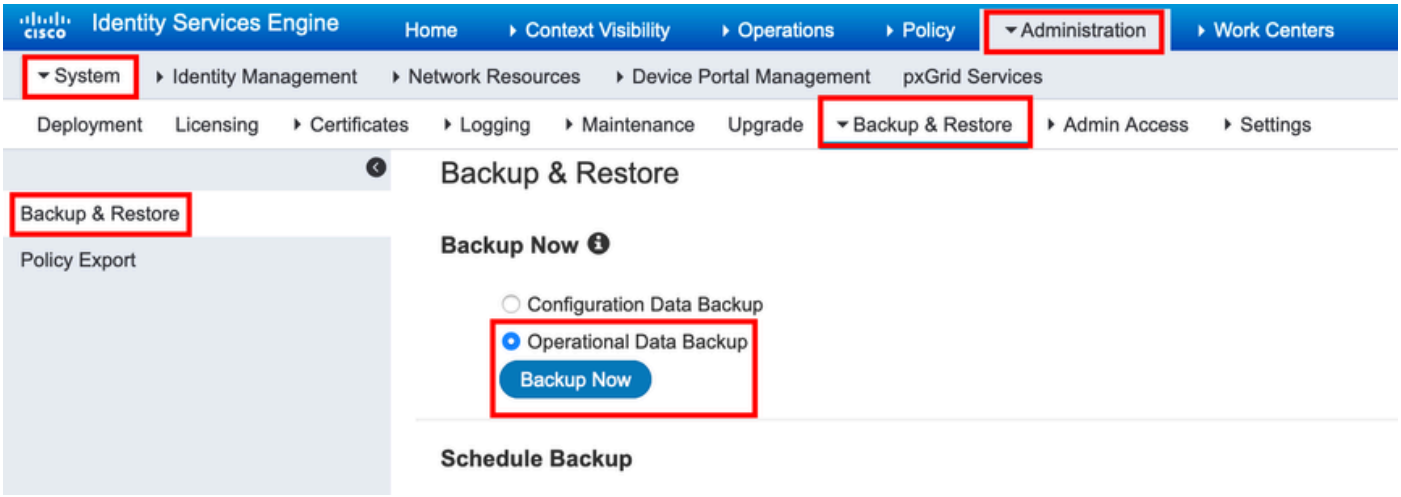
```
% Internal CA Store is not included in this backup. It is recommended to export it using "application c
% Creating backup with timestamped filename: ConfigBackup-CLI-CFG10-200326-0705.tar.gpg
% backup in progress: Starting Backup...10% completed
% backup in progress: Validating ISE Node Role...15% completed
% backup in progress: Backing up ISE Configuration Data...20% completed
% backup in progress: Backing up ISE Indexing Engine Data...45% completed
% backup in progress: Backing up ISE Logs...50% completed
% backup in progress: Completing ISE Backup Staging...55% completed
% backup in progress: Backing up ADEOS configuration...55% completed
% backup in progress: Moving Backup file to the repository...75% completed
% backup in progress: Completing Backup...100% completed
ise/admin#
```

从GUI执行按需ISE操作数据备份

步骤1.配置存储库请参阅如何在ISE上配置存储库

步骤2.启动ISE操作备份。

登录到ISE GUI，导航到管理>系统>备份和恢复，选择操作数据备份，然后单击立即备份，如映像所示：



步骤3.提供Backup Name、Repository Name和Encryption Key，然后单击Backup。

⚠ 提示：确保您记得加密密钥。

从CLI执行按需ISE操作数据备份

步骤1.配置存储库请参阅如何在ISE上配置存储库

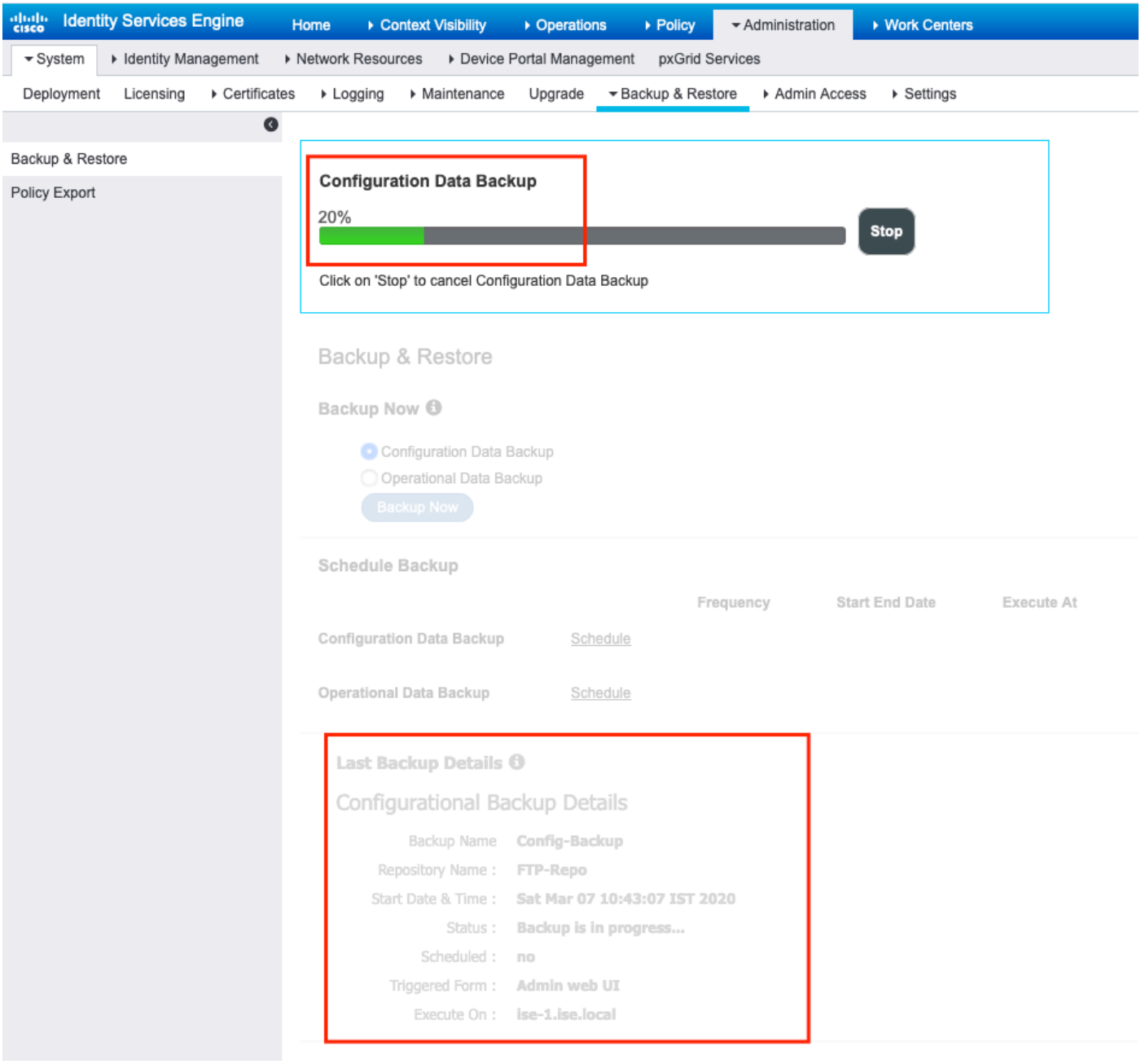
步骤2.登录主MNT节点的CLI并运行命令：

backup <backup file name> repository <repository name> ise-operational encryption-key plain <encryption key>

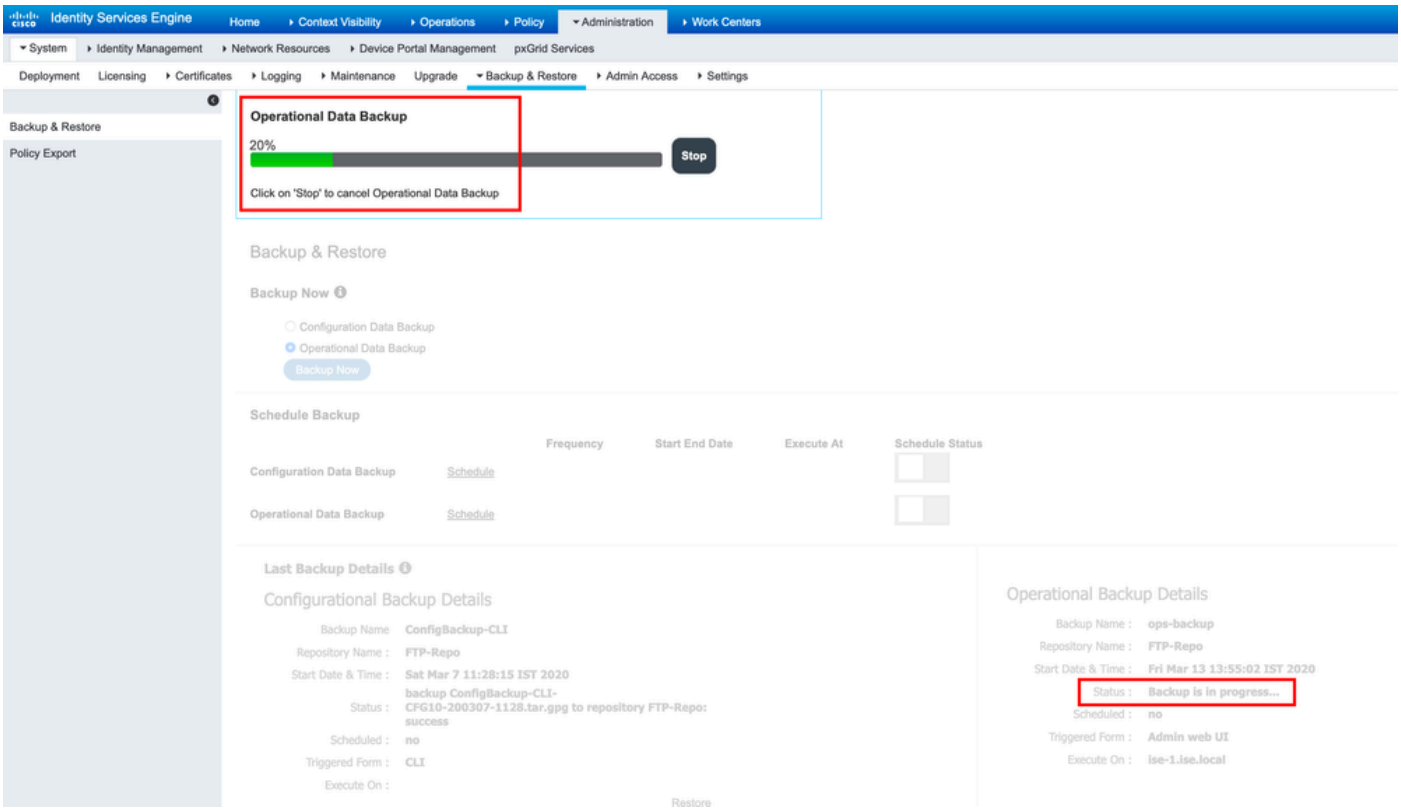
```
ise/admin# backup Ops-Backup-CLI repository FTP-Repo ise-operational encryption-key plain <backup passw
% Creating backup with timestamped filename: Ops-Backup-CLI-OPS10-200326-0719.tar.gpg
% backup in progress: Starting Backup...10% completed
% backup in progress: starting dbbackup using expdp.......20% completed
% backup in progress: starting cars logic.......50% completed
% backup in progress: Moving Backup file to the repository...75% completed
% backup in progress: Completing Backup...100% completed
ise/admin#
```

验证

导航到管理>系统>备份和恢复，查看配置数据备份进度，如图所示：



导航到管理>系统>备份和恢复以查看操作数据备份进度，如映像所示：



您还可以从PAN节点的CLI检查配置备份的进度。

<#root>

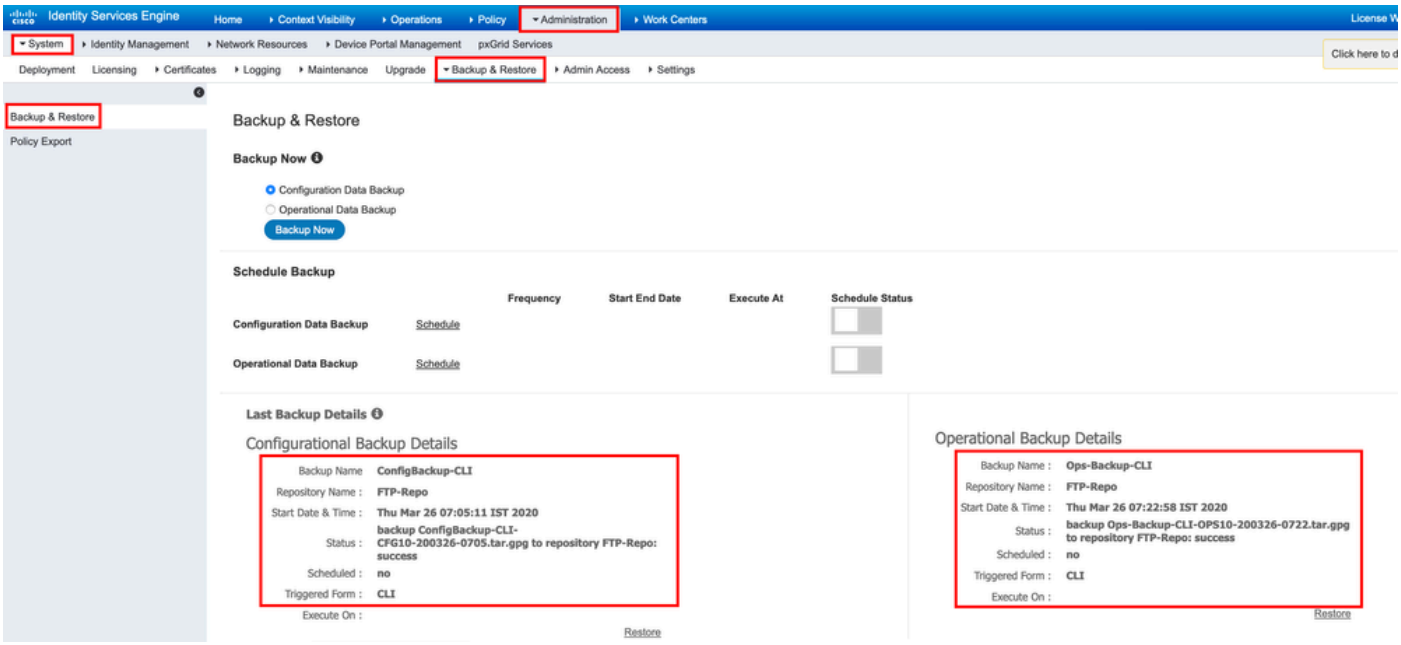
ise/admin#

show backup status

```
%% Configuration backup status
%% ----------------------------
%       backup name: ConfigBackup-CLI
%        repository: FTP-Repo
%        start date: Thu Mar 26 07:05:11 IST 2020
%         scheduled: no
%    triggered from: CLI
%              host:
%            status: Backup is in progress
%       progress %: 50
% progress message: Backing up ISE Logs

%% Operation backup status
%% ------------------------
%  No data found. Try 'show backup history' or ISE operation audit report
ise/admin#
```

备份完成后，您可以看到备份状态为成功。



故障排除

确保ISE管理节点上正在运行ISE索引引擎服务。

<#root>

```
ise-1/admin# show application status ise

ISE PROCESS NAME                       STATE            PROCESS ID
--------------------------------------------------------------------
Database Listener                      running          15706
Database Server                        running          89 PROCESSES
Application Server                     running          25683
Profiler Database                      running          23511
```

ISE Indexing Engine

running

28268

```
AD Connector                           running          32319
M&T Session Database                   running          23320
M&T Log Processor                      running          16272
```

要调试ISE上的备份恢复，请使用以下调试：

```
ise-1/admin# debug backup-restore backup ?
  <0-7>  Set level, from 0 (severe only) to 7 (all)
  <cr>   Carriage return.
```

```
ise-1/pan# debug backup-restore backup 7
ise-1/pan#
ise-1/pan# 6 [25683]:[info] backup-restore:backup: br_history.c[549] [system]: ISE backup/restore initi
7 [25683]:[debug] backup-restore:backup: br_backup.c[600] [system]: initiating backup Config-Backup to
7 [25683]:[debug] backup-restore:backup: br_backup.c[644] [system]: no staging url defined, using local
7 [25683]:[debug] backup-restore:backup: br_backup.c[60] [system]: flushing the staging area
7 [25683]:[debug] backup-restore:backup: br_backup.c[673] [system]: creating /opt/backup/backup-Config-
7 [25683]:[debug] backup-restore:backup: br_backup.c[677] [system]: creating /opt/backup/backup-Config-
7 [25683]:[debug] backup-restore:backup: br_backup.c[740] [system]: creating /opt/backup/backup-Config-
7 [25683]:[debug] backup-restore:backup: br_backup.c[781] [system]: calling script /opt/CSCOcpm/bin/ise
6 [25683]:[info] backup-restore:backup: br_backup.c[818] [system]: adding ADEOS files to backup
6 [25683]:[info] backup-restore:backup: br_backup.c[831] [system]: Backup password provided by user
6 [25683]:[info] backup-restore:backup: br_backup.c[190] [system]: No post-backup entry in the manifest
7 [25683]:[debug] backup-restore:backup: br_backup.c[60] [system]: flushing the staging area
6 [25683]:[info] backup-restore:backup: br_backup.c[912] [system]: backup Config-Backup-CFG10-200421-06
6 [25683]:[info] backup-restore:backup: br_history.c[487] [system]: updating /tmp/ise-cfg-br-flags with
```

使用no debug backup-restore backup 7禁用节点上的调试。

```
ise-1/admin# no debug backup-restore backup 7
```

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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