如何從CVP VXML伺服器收集堆轉儲和執行緒轉 儲

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簡介

本檔案介紹如何從思科客戶語音入口網站(CVP)語音可延伸標籤語言伺服器(VXML)收集Tomcat的堆 轉儲和執行緒轉儲。

必要條件

需求

思科建議您瞭解以下主題:

- CVP
- CVP VXML伺服器
- CVP VXML應用

採用元件

本文中的資訊係根據以下軟體和硬體版本:

- CVP版本11.5
- CVP VXML伺服器11.5

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。

問題

方案1.在監控VXML伺服器效能時,您發現它使用4GB記憶體。 您希望在記憶體洩漏崩潰之前知道 其根本原因。 案例2.在監控VXML伺服器時,您發現VXML伺服器使用高執行緒(~500),這種情況非常少見。您想 瞭解如何分析執行緒使用情況,找出執行緒狀態和佔用更多執行緒的元件/應用程式。

例如:VXML Tomcat佔用4.5GB的總記憶體,如圖所示。

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Processes	Performance	Users	Details	Services					
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tomcat8.exe		7696	Running		SYSTEM	00	301,740 K	Commons Daemon	
notepad.exe		17020	Running		dutta_1247	00	210,072 K	Notepad	
explorer.exe		1480	Running		V_256454	00	166,524 K	Windows Explorer	
🍰 java.exe		6936	Running		SYSTEM	00	162,844 K	Java(TM) Platform S	
splunkd.exe		1676	Running		SYSTEM	00	102,840 K	splunkd service	
svchost.exe		2400	Running		NETWORK	00	84,012 K	Host Process for Wi	
ServerManager.exe		12840	Running		Gupta_237	00	52,416 K	Server Manager	
-		-							

4.5 GB的VXML記憶體

疑難排解

獲取堆轉儲的步驟

步驟1.下載JDK版本(類似於CVP中安裝的版本)

C:\Cisco\CVP\jre\bin>java -version java version "1.7.0_51" Java(TM) SE Runtime Environment (build 1.7.0_51-b13) Java HotSpot(TM) Client VM (build 24.51-b03, mixed mode) 步驟2.將JDK從案頭複製到CVP伺服器。

Download windows JDK exe Open with 7-Zip Dump contents into a directory %JDK-EXE% cmd: cd %JDK-EXE%.rsrc\1033\JAVA_CAB10 cmd: extrac32 111 Now have a tools.zip in directory, open it in 7-Zip Extract contents into a new directory %JDK-VERSION% cmd: cd %JDK-VERSION% cmd: for /r %x in (*.pack) do .\bin\unpack200 -r "%x" "%~dx%~px%~nx.jar"

附註:只需從<u>http://www.oracle.com/technetwork/java/javaee/downloads/index.html</u>下載 JDK並在本地資料夾中安裝EXE,然後將JDK從本地電腦複製到CVP。

步驟3.從工作管理員收集VXML伺服器的進程ID(PID)。

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步驟4.執行此命令以收集HeapDump。(例如: jmap -dump:file=vxml.hprof <TOMCAT例項的 PID)。

C:\jdk1.7.0_80\jdk1.7.0_80\bin>jmap -dump:file=vxml.hprof 1308 Dumping heap to C:\jdk1.7.0_80\jdk1.7.0_80\bin\vxml.hprof ... Heap dump file created

<u>C:\jdk1.7.0_80\jdk1.7.0_80\bin></u>

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注意:已建立hProf,您可以複製到本地系統並離線監視。

獲取執行緒轉儲的步驟

與堆轉儲相比,執行緒轉儲收集相對容易。

步驟1.連線到使用jVisualVM的<CVP VXML伺服器>:9696(9696是VXML伺服器的預設JMX埠)上的CVP VXML伺服器。

步驟2.按一下右鍵JXM連接和收集執行緒轉儲。



步驟3.此處執行緒轉儲已轉儲到遠端伺服器,可以儲存為檔案並用於進一步分析。