使用Jconsole排除CVP VXML服务器内存问题

目录

<u>简介</u> <u>先决条件</u> <u>要求</u> <u>使用的组件</u> Jconsole实用程序

简介

本文档介绍如何使用Java控制台(jconsole)工具对Cisco Unified Customer Voice Portal(CVP)内存泄漏问题进行故障排除。

先决条件

要求

Cisco 建议您了解以下主题:

- •思科统一客户语音门户(CVP)
- Java控制台实用程序

使用的组件

本文档中的信息基于CVP版本12.5。

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。

Jconsole实用程序

要对呼叫服务器、VXML服务器内存泄漏或性能相关问题进行故障排除,通常需要在jconsole实用程序中启用java堆转储跟踪。这通常在您通过Windows事件查看器、任务管理器和/或性能日志工具将资源问题缩小到服务器中的特定服务或服务后完成。实用程序转储堆是低级跟踪文件,建议在CVP故障排除跟踪级别上打开。

默认情况下,Jconsole位于CVP服**务器**的路径C:\Cisco\CVP\jre\bin中。默认情况下,已在 **jmx_callserver.conf、jmx_vxml.conf**、jmx_oamp.conf和jmx_wsm.conf 配置文件中为每个CVP服务 器配置了端口详细信息。

- •呼叫服务器JMX端口2098
- VXML服务器JMX端口9696
- OAMP服务器JMX端口10001
- WSM JMX端口2099

🧾 jmx_callserver.conf - Notepad	📕 jmx_vxml.conf - Notepad
File Edit Format View Help	File Edit Format View Help
<pre>com.sun.management.jmxremote.ssl.need.client.auth = false com.sun.management.jmxremote.authenticate = false com.sun.management.jmxremote.port = 2098 com.sun.management.jmxremote.ssl = false #com.sun.management.jmxremote.ssl.config.file= com.sun.management.jmxremote.rmi.port = 2097</pre>	<pre>com.sun.management.jmxremote.ssl.need.client.auth = false com.sun.management.jmxremote.authenticate = false com.sun.management.jmxremote.port = 9696 com.sun.management.jmxremote.ssl = false #com.sun.management.jmxremote.ssl.config.file= com.sun.management.jmxremote.rmi.port = 9697</pre>
🧾 jmx_oamp.conf - Notepad	jmx_wsm.conf - Notepad
Jimx_oamp.conf - Notepad File Edit Format View Help	│ jmx_wsm.conf - Notepad File Edit Format View Help

您可以运行Jconsole实用程序,如以下步骤所述:

步骤1.导航**到%CVP_HOME%/CVP/jre/bin/jconsole.exe**,然后双击jconsole.exe。



步骤2.连接到**localhost**,并为要连接的CVP组件指定端口号,例如,对于CVP VXML服务器,我们 使用JMX端口9696。将"用户名**"和**"密**码"字**段留空。单击 Connect。

🛃 Java Monitoring & Management Console		-	x
Connection Window Help			
	JConsole: New Connection		
	New Connection		
	Remote Process:		
	localhost:9696		
	Usage: <hostname>:<port> OR service:jmx:<protocol>:<sap></sap></protocol></port></hostname>		
	Username: Password:		
	Connect Cancel		

步骤3.单击"不安**全连接"**。

Secure connection failed. Retry insecurely?			
The connection to localho using SSL. Would you like to try with (Username and password	ost:9696 could not rout SSL? I will be sent in pla	: be made ain text.)	
Insecure connection	Cancel		

步骤4.选择MBeans**选项**卡。

🛃 Java Monitoring & Management Console - Administrator@localhost:9696	-	C X
💁 Connection Window Help		_ & ×
Overview Memory Threads Classes VM Summary MBeans		-
Overview Trendy (Treade Cases) with during y (recent)		
< 111 >		

步骤5.展开**com.sun.management>**HotSpotDiagnostic>**Operations**,然后单击**dumpHead**。

🍯 Java Monitoring & Manag	jement Console - Administ	rator@localhost:9696	-	• x
🙆 Connection Window He	lp			_ 8 ×
Overview Memory Threads	Classes VM Summary MBea	ans		-
Catalina Cisco Unified CVP VXML S JMImplementation Users com.cisco.ccbu com.sun.management	Operation invocation void dumpHeap (MBeanOperationInfo	(p0 String , p1 true)		
🗄 🎯 DiagnosticCommand	Name	Value		
🖹 🧐 HotSpotDiagnostic	Operation:	dumpHean		
	Description	dumpheap		
Operations	Impact			
dumpHeap	PeturnTyne	void		
getVMOption	Parameter-0			
setVMOption	Name	n0		
java.lang	Description	p0		
java.nio	Type	java.lang.String		
java.util.logging	Parameter-1:			
• org.apache.commons.po	Name	p1		
	Description	p1		
	Туре	boolean		
	Descriptor			
	Name	Value		
	Operation:			
	openType	javax.management.openmbean.SimpleType(name=java.lang.Void)		
	originalType	void		
	Parameter-0:			
	openType	javax.management.openmbean.SimpleType(name=java.lang.String)		
	originalType	java.lang.String		
	Parameter-1:			
	openType	javax.management.openmbean.SimpleType(name=java.lang.Boolean)		
	originalType	boolean		
< III >				

步骤6.在**p0中**输入扩展名为.hprof的转储的文件名,例如**vxmlDump.hprof**。保**持**p1**真**。

🛃 Java Monitoring & Management Console - Administrator@localhost:9696 🛛 📮 🗖 🗶					
🕌 Connection Window He	lp			_	5 ×
Overview Memory Threads	Classes VM Summary MBea	ns			-
Catalina Cisco Unified CVP VXML S Cisco Unified CVP VXML S Cisco Unified CVP VXML S Cisco Users Cisco com.cisco.ccbu	Operation invocation void dumpHeap (MBeanOperationInfo	p0 vxmlDump.hprof , p1 true)			
com.sun.management	Name	Value			
⁽⁹⁾ DiagnosticCommand	Operation:				
Attributes	Name	dumpHeap			
	Description	dumpHeap			
dumpHean	Impact	UNKNOWN			
	ReturnType	void			
setVMOption	Parameter-0:				
🖅 🔚 java.lang	Name	p0			
🗄 🖳 java.nio	Description	p0			
🗄 🖳 java.util.logging	Туре	java.lang.String			
표 🚽 org.apache.commons.po	Parameter-1:				
	Name	p1			
	Description	pi halaa			
	Descriptor				
	Name	Value			
	Operation:				
	openType	javax.management.openmbean.SimpleType(name=java.lang.Void)			
	originalType	void			
	Parameter-0:				
	openType	javax.management.openmbean.SimpleType(name=java.lang.String)			
	originalType	java.lang.String			
	Parameter-1:				
	openType	javax.management.openmbean.SimpleType(name=java.lang.Boolean)			
	originali ype	poolean			

注意:思科不建议在工作时间内转储堆,因为它可能导致VXML服务器服务在流程期间短暂冻 结。思科建议在非工作时间内执行此活动。

步骤7.单击dumpHeap。

📓 Java Monitoring & Management Console - Administrator@localhost:9696 🛛 🕒 💌					
🕌 Connection Window He	lp			_	8 ×
Overview Memory Threads	Classes VM Summary MBea	ans			-
Catalina Cisco Unified CVP VXML S JMImplementation Users com.cisco.ccbu	Operation invocation void dumpHeap (MBeanOperationInfo	p0 vxmlDump.hprof , p1 true)			
🖃 🚽 com.sun.management	Name	Value			
·································	Operation:				
HotSpotDiagnostic	Name	dumpHeap			
	Description	dumpHeap			
	Impact	UNKNOWN			
	ReturnType	void			
setVMOption	Parameter-0:				
iava.lang	Name	p0			
java.nio	Description	p0			
🛓 🚽 java.util.logging	Туре	java.lang.String			
org.apache.commons.po	Parameter-1:				
_	Name	p1			
	Description	p1			
	Descriptor				
	Name	Value			
	Operation:				
	openType	javax.management.openmbean.SimpleType(name=java.lang.Void)			
	originalType	void			
	Parameter-0:				
	openType	javax.management.openmbean.SimpleType(name=java.lang.String)			
	originalType	java.lang.String			
	Parameter-1:	inverse and a second and Circle Transformer (second land Backson)			
	openiype	javax.management.openmbean.simple1ype(name=java.lang.boolean)			
	originari ype	boolean			
< III >					

步骤8.您必须看到消息Method已成功调用。Click OK.

👙 Java Monitoring & Ma	nagement Console - Ad	ministrator@localh	ost:9696	
🛃 Connection Window	Help			
Overview Memory T	Info	x		
Catalina Cisco Unified CV JMImplementation Users com.cisco.ccbu	Method successfu	ully invoked	nprof , p1 tru	Je)
E 1 DiagnosticComman	nd I I manie	VCICC		
	Operation:			
Attributes	Name	dumpHeap		
- Operations	Description	dumpHeap		
dumpHoon	Impact	UNKNOWN	UNKNOWN	
act/MOster	ReturnType	void		
getvMOption	Parameter-0:			
setvMOption	N1	-0		

步骤9.收集生成的转储文件。VXML服务器转储的默认路径是

C:\Cisco\CVP\VXMLServer\Tomcat\bin。

C:\Cisco\CVP\VXMLServer\Tomcat\bin

Name

vxmlDump.hprof

注:此工具用于排除VXML服务器内存泄漏问题。一旦确定了导致泄漏的应用程序,必须启用 此工具,必须收集所需信息,并且在重新创建问题后,必须禁用它。Jconsole不设计为监控工 具,不能无限期启用。