通過Intersight API請求對IMM伺服器上的操作進 行故障排除

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簡介

本文檔介紹在無法通過UI對伺服器執行某些操作時發生爭用時可能有用的API請求。

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必要條件

需求

思科建議您瞭解以下主題:

- Intersight
- 整合運算系統(UCS)伺服器
- Intersight管理模式(IMM)
- 應用程式開發介面(API)

採用元件

本文中的資訊係根據以下軟體和硬體版本:

- Cisco UCS 6454交換矩陣互聯, 韌體4.2(1m)
- UCSB-B200-M5刀鋒伺服器,韌體4.2(1a)

• Intersight軟體即服務(SaaS)

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

Cisco Intersight提供基於雲的RESTful API來管理跨多個資料中心的Intersight連線目標。Cisco Intersight基礎設施服務包括對物理和虛擬基礎設施的部署、監控、管理和支援。

如果無法通過Intersight的使用者介面(UI)在Intersight託管伺服器上執行某些操作,則由於選項灰顯 或對UI的訪問不可用,API請求可以成為有用的替代方法。

來自Intersight SaaS或Intersight裝置帳戶的API請求

概述步驟

下一個示例遵循一致的結構,但使用的具體引數和值可能會有所不同。以下是相關步驟的簡短摘要 :

登入到Intersight帳戶。

對於SaaS環境,在瀏覽器中,導航到<u>API Reference</u>,然後使用您的帳戶登入。

- ◆ 註意:對於裝置環境,如Intersight連線的虛擬裝置(CVA)或Intersight專用虛擬裝置(PVA)在瀏 覽器中,導航到<u>https://<Appliance-Hostname>/apidocs/apirefs</u>,然後使用裝置憑據登入。
 - 1. 查詢所需的API請求並使用 GET 使用已知欄位值(例如Serial Number、Server Profile、Server Name、Device Moid等)過濾呼叫。
 - 2. 使用 PATCH 通過往來行操作進行呼叫以執行所需的任務

🔎 提示:在查詢引數中,請確保對鍵和值示例使用相同的精確字母以避免錯誤。

在《API參考》指南中,請檢視 Response Model 頁籤檢視正確的語法以及可在呼叫的負載中使用的所有 支援的操作。例如,從 /api/v1/compute/BladeIdentities/, 支援的AdminAction為 None中, Decommission中, Recommission中, Reack中, Remove,和 Replace.本文檔中會使用此模型。



停用/停用伺服器

在Intersight API參考文檔中,查詢 compute/BladeIdentities 請求,選擇第一個 GET 呼叫,然後輸入所需的 查詢引數。

此示例使用以下引數:

主要	價值	使用率
\$filter	串列eq 'FLM2402001A'	使用提供的序列號過濾 到伺服器的輸出。
\$select	Moid	從該對象中選擇要顯示 的值。顯示的值是伺服 器型號。

cisco Intersight Developer Center	Guides API Reference Downloads Code F	Repo Supp		수 Luis Uribe Roja	as
Service Intersight	ary /api/v1/compute/Bladeldentities	nt 🗨	REST Client GET /api/v1/compute/Bladeldentitie	s	
API Reference v1.0.11-11360 Q blade Compute/Bladeldentities Compute/Bladeldentities Compute.Bladeldentity' resource.	Sfliter (string) Filter criteria for the resources to return. A URI with a Sfliter query option identifies a subset of the entries from the Collection of Entries. The subset is determined by selecting only the Entries that satisfy the predicate expression specified by the Sfliter option. The expression language that is us Sfliter queries supports references to properties and literals. The literal values can be strings enclosed in single quotes, numbers and boolean values (true or false). Sorderby (string)	query e sed in osed	+ Query Parameter Key Sfilter Key Sselect 200 Success	3 Value Serial Eq 'FLM2402001A' Value Moid	
Read a 'compute.Bladeldentity' resource.	Determines what properties are used to sort the collection of resources.		Response Text Response Info		
Update a 'compute.Bladeldentity' resource.	Stop (integer) Specifies the maximum number of resources to return in the response.	guery	1 { 2 "ObjectType": "compute.Bl 3 "Results": [
Update a 'compute.Bladeldentity' resource.	Sskip { integer } Specifies the number of resources to skip in the response.	query	" " " " " " " " " " " " " " " " " " "	sladeIdentity", 6692d328bb7bd", e.BladeIdentity"	
	Seelect (string) Specifies a subset of properties to return.	query			
	Sexpand (string) Specify additional attributes or related resources to return in addition to the primary resources.	query			

套用 PATCH 通過所需操作進行呼叫。此示例使用:

{"AdminAction":"Decommission"}

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Service Intersight	/api/v1/compute/BladeIdentities /{Moid}	REST Client	REST Client × PATCH /api/v1/compute/BladeIdentities/(Moid)
API Reference v1.0.11-11360	Parameters Request Model Response Model Moid (string) The universe Mold identifier of a resource instance	path	{Moid} * 642454466f62692d328bb7bd
compute/Bladeldentities ^ corr Read a 'compute.Bladeldentity' resource. corr Read a 'compute.Bladeldentity' resource. Update a	If-Match { string } For methods that apply server-side changes, and in particular for PUT, If-f the lost update problem. It can check if the modification of a resource that not override another change that has been done since the original resource cannot be fulfilled, the 412 (Precondition Failed) response is returned. Whe POST or PUT, the If-Match header must be set to the value of the resource which no lost update problem should occur. For example, a client send a C	header Match can be used to prevent t the user wants to upload will se was fetched. If the request en modifying a resource using se ModTime property after SET request to obtain a	1 ("AdsinAction":"Decommission") Send 200 Success
розт "compute.Biadeidentity" resource. Ирdate a рисн "compute.Biadeidentity" resource.	created or modified. The client then sends a POST or UT request with th ModTime property of the resource as obtained in the GET request.	e If-Match header set to the	Response Text Rasponse Info
compute/Blades ~			<pre>""""""""""""""""""""""""""""""""""""</pre>

₽ 提示:如果需要重新執行,請使用{"AdminAction":"Recommission"}。

取消分配伺服器配置檔案

查詢Server/Profiles請求並選擇第一個GET呼叫,然後輸入所需的查詢引數。

此示例使用以下引數:

主要	價值	使用率
\$filter	Name Eq 'UCSX- Server-boot-SAN'	過濾輸出到已輸入名稱 的伺服器配置檔案。
\$select	Moid,名稱	從該對象中選擇要顯示 的值。在這種情況下

the Inters	sight Developer Center	Guides API Reference Downloads Cod	le Repo Su	upport	수 Luis Uribe F	Rojas
Service Intersight		er /api/v1/server/Profiles	nt 💶	REST Client		
API Reference	v1.0.11-11265	Sfilter (string)	query	+ Query Parameter Key	Value	
server/Profi	iles ^2	the entries from the Collection of Entries. The subset is determined by selecting only the E that satisfy the predicate expression specified by the \$filter option. The expression langua that is used in \$filter queries supports references to properties and literals. The literal value be strings enclosed in single quotes, numbers and bolean values (true or false).	et or Entries Ige Ies can	Sfilter Key Sselect	Name Eq 'UCSX-Server-boot-SAN' Value Mold,Name	
GET	Read a 'server.Profile' resource. Create a 'server.Profile'	Sorderby (string)	query	Sand 200 Success		
POST	resource.	Determines what properties are used to sort the collection of resources.	_	Response Text Response Info		
GET	Read a 'server.Profile' resource.	\$top { integer }	query			
POST	Update a 'server.Profile' resource.	Specifies the maximum number of resources to return in the response.		1 { 2 "ObjectType": "ser 3 "Results": [
РАТСН	Update a 'server.Profile' resource.	\$skip { integer }	query	4 { 5 "ClassId": "se 6 "Moid": "6269e 7 "Name": "UCSX-	rver.Profile", 37b77696e2d33897dd0", Server-boot-SANT.	
DELETE	Delete a 'server.Profile' resource.	Specifies the number of resources to skip in the response.		8 "ObjectType": 9 }		
		\$select (string)	query			
		Specifies a subset of properties to return.				
		<pre>\$expand (string)</pre>	query			
		Specify additional attributes or related resources to return in addition to the primary resour	rces.			

使用所需的操作應用PATCH呼叫。此示例使用:

{"Action":"Unassign"}



刪除伺服器

在Intersight API參考文檔中,查詢compute/BladeIdentities請求並選擇第一個 GET 呼叫,然後輸入 所需的查詢引數。

此示例使用以下引數:

主要	價值	使用率
\$filter	串列eq 'FLM2402001A'	只過濾提供序列號的伺 服器輸出。
\$select	Moid	從該對象中選擇要顯示 的值。顯示的值是伺服 器型號。

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Service Intersight			ost /api/v1/compute/BladeIdentities REST Click Parameters Response Model Response Model	ent O	REST Client GET /api/v1/compute/BladeIdentities	
API Referenc	e v1.0.11-11265	3	Sfilter (string)	query	+ Query Parameter	
Q blade	× Nadeldentities	2	Filter criteria for the resources to return. A URI with a \$filter query option identifies a of the entries from the Collection of Entries. The subset is determined by selecting or Entries that satisfy the predicate expression specified by the \$filter option. The expr language that is used in \$filter queries supports references to properties and literail literal values can be strings enclosed in single quotes, numbers and boolean values false).	a subset only the ression 3. The (true or	Key Value Sfilter Serial Eq FLM2402001A Key Value Sselect Moid	
GET	Read a 'compute.Bladeldentity' resource.		Sorderby { string }	query	Send 200 Success	
GET	Read a 'compute.Bladeldentity' resource.		Determines what properties are used to sort the collection of resources.		Response Text Response Info	
POST	Update a 'compute.Bladeldentity' resource.		Stop { integer }	query	1 (2 "ObjectTune": "compute BladeTdentity.List".	r
	Update a		Specifies the maximum number of resources to return in the response.		3 "Results": [4 {	
PATCH	'compute.Bladeldentity' resource.		\$skip { integer }	query	<pre>5 "Classio": "Compute.Bladeldentity", 6 "Moid": "63c88bfb6f62692d325b9643", 7 "ObjectType": "compute.BladeIdentity"</pre>	
compute/8	Nades ~		Specifies the number of resources to skip in the response.			

使用所需的操作應用PATCH呼叫。此示例使用:

{"AdminAction":"Remove"}

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Service Intersight	/api/v1/compute/BladeIdentities /{Moid}	REST Client	REST Client × PATCH /api/v1/compute/Bladeldentities/(Moid)			
API Reference v1.0.11-11265	Parameters Request Model Response Model Moid (string)	path	(Moid) • 2 63c88b/b6f62692d325b9643			
compute/Bladeldentities ^	The unique Moid identifier of a resource instance.		1 ("AdminAction":"Remove")			
orr Read a 'compute.Bladeldentity' resource. orr Read a 'compute.Bladeldentity' resource. Update a 'compute.Bladeldentity'	If-Match (string) For methods that apply server-side changes, and in particular for PUT, If-Matc prevent the lost update problem. It can check if the modification of a resource to upload will not override another change that has been done since the origin fetched. If the request cannot be fulfilled, the 412 (Precondition Failed) respon When modifying a resource using POST or PUT, the If-Match header must be f the resource ModTime property after which no lost update problem should oc client send a GET request to obtain a resource, which includes the ModTime p	header th can be used to that the user wants ial resource was ise is returned. set to the value of cur. For example, a roperty. The	Send 200 Success			
PATCH Update a 1 PATCH 'compute.Bladeldentity' resource.	Mod Time indicates the last time the resource was created or modified. In each POST or PUT request with the If-Match header set to the ModTime property of obtained in the GET request.	ent then sends a f the resource as	Response Text Response Info			
compute/Blades 、			<pre>4 "ClassId": "compute.BladeIdentity", 5 "CreateTime": "2023-01-10700-16:59.082", 6 "WooTime": "2023-03-28722:04:57.071254342", 7 "Tags": [], 8 "Owners": [], 9 "Scc1f0edr5564512d30100899", 10 "611384ceT52612d33d1ff4" 11], 12 "SharedScope": ", 13 "AccountMoid": "Scc1f0edr5564612d30108090", 14 "DomainGroupMoid": "Scc1f0edr5564612d30108030", 15 "Ancestors": [], 16 "DisplayAmmes": [], 17 "hierarchical": [], 18 "chassis-1-server-2" 19],</pre>			

通過裝置控制檯中的API資源管理器排除操作故障

裝置控制檯允許您監控裝置的運行狀況,以及它們與Intersight的連線狀態。您可以生成包含診斷資 訊的技術支援捆綁包,以便進行故障排除和分析。此外,裝置控制檯還能夠啟動API Explorer以在 伺服器上執行基於Redfish™的操作。

如果Intersight或裝置之間失去連線,裝置控制檯中的API Explorer也可用於執行一些基本的故障排 除操作。

1)開啟Device console(裝置控制檯),導航到一個Fabric Interconnect IP address(交換矩陣互聯 IP地址),然後選擇Inventory(庫存)頁籤。

2)導航到需要診斷的特定裝置,選擇裝置右側的三個點,然後選擇 Launch API Explorer.API Explorer僅針 對該裝置啟動,而不針對其他裝置。

重新啟動伺服器的CIMC管理控制器

啟動伺服器的API資源管理器:

cisco DEVICE CONSOLE F340-24-21-IMM-1						G		
SYSTEM INFORMATION DEVICE CONNECTOR INVENTORY DIAGNOSTIC DATA								
Servers Chassis Fabric Ex	dender							
				10 items found 10 v per pa	age K			
						Label		
() F340-24-21-IMM-1-1-3	Healthy		UCSB-B480-M5	FLM224403QB	qam-i	imm-1		
() F340-24-21-IMM-1-1-5			UCSB-B200-M5	FCH21427BPW	imm-t	lest-user-laber-1		
() F340-24-21-IMM-1-1-6	Healthy	Active	UCSB-B200-M5	FLM23390B0R		Power Off		
G F340-24-21-IMM-1-2-1		O Decommissioned	UCSB-B200-M6	FCH24387E7G		Turn On Locator		
G F340-24-21-IMM-1-2-5	Healthy		UCSB-B200-M5	FCH22457G25		Launch KVM		
() F340-24-21-IMM-1-3-1			UCSX-210C-M6	FCH251372LZ		Launch API Explorer		
() F340-24-21-IMM-1-3-3			UCSX-210C-M6	FCH244572F0		Generate Tech Support B	undle	

在{ManagerID}中鍵入CIMC並應用POST Managers/{ManagerId}/Actions/Manager.Reset呼叫並新 增重置型別。

此示例使用:

{"ResetType": "ForceRestart"}



重新啟動I/O模組(IOM)

啟動IOM的API資源管理器:

cisco DEVICE CONSOLE	F340-24-21-IMM-1					Đ
SYSTEM INFORMATION DEVICE C	ONNECTOR INVENTORY DIAGN	IOSTIC DATA				
Servers Chassis Fabric Extende						
			3 items found 10 v	per page 🔣 🔍 👖		
F340-24-21-IMM-1-1	chassis-1		UCSB-5108-AC2	FOX1813GDWM		
F340-24-21-IMM-1-2	chassis-2		N20-C6508	FOX1611H: Launch A	PI Explorer (IO	M 1)
F340-24-21-IMM-1-3	chassis-3		UCSX-9508	FOX2503P; Launch A	PI Explorer (IO	M 2)
				Generate	Tech Support E	3undle

在{ManagerID}中鍵入CMC並應用POST Managers/{ManagerId}/Actions/Manager.Reset呼叫並新 增重置型別。此示例使用:

{"ResetType": "ForceRestart"}



在{0}中重新啟動對等IOMManagerID}欄位,輸入 PeerCMC 和以前一樣。



相關資訊

<u>Intersight API概述</u>

<u>裝置控制檯概述</u>

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)。