

在Contact Center Enterprise环境中跟踪任务传送事件

目录

[简介](#)

[先决条件](#)

[要求](#)

[使用的组件](#)

[所需的日志](#)

[背景信息](#)

[CCP和任务路由](#)

[日志分析](#)

[简单消息流](#)

[下载CCP日志](#)

[使用RTMT](#)

[使用CCP命令行](#)

[相关信息](#)

简介

本文档介绍路由到Contact Center Enterprise环境中座席的新任务的消息流。

先决条件

要求

Cisco 建议您了解以下主题：

- 思科客户协作平台(CCP)
- 思科Finesse
- 思科套装联系中心企业版(PCCE)
- 思科统一联系中心企业版(UCCE)

使用的组件

本文档中的信息基于以下软件和硬件版本：

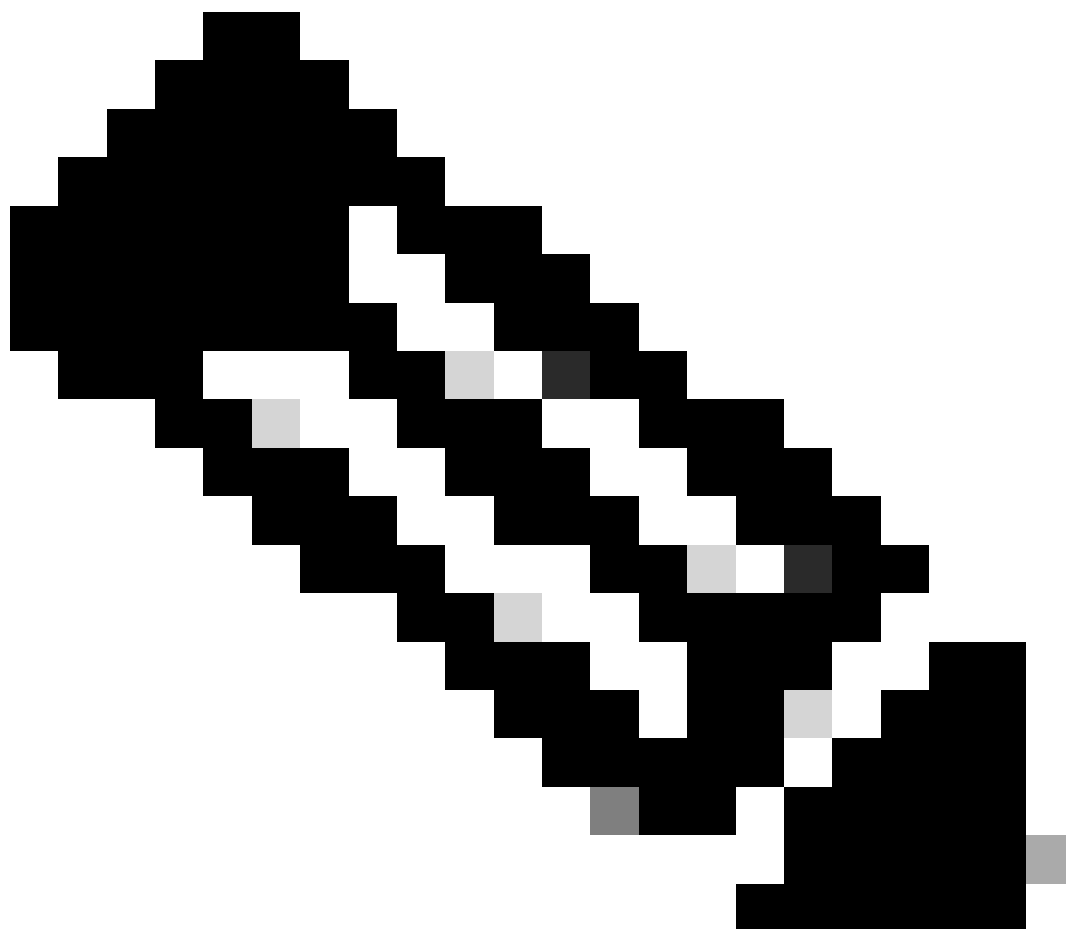
- ICM版本：12.6(1)
- Finesse版本：12.6(1)
- CCP版本：12.5(1) SU1

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。

所需的日志

- CCP公共REST API(CCBU-ccppublicapps)
 - CCP REST API (CCBU-ccpapi)
 - CCP运行时服务(CCBU-runtime)
 - Finesse桌面Web服务
 - ICM CTI服务器(ctisvr)
 - ICM媒体路由PIM (mr pim)
 - ICM路由器(rtr)
-



注意：

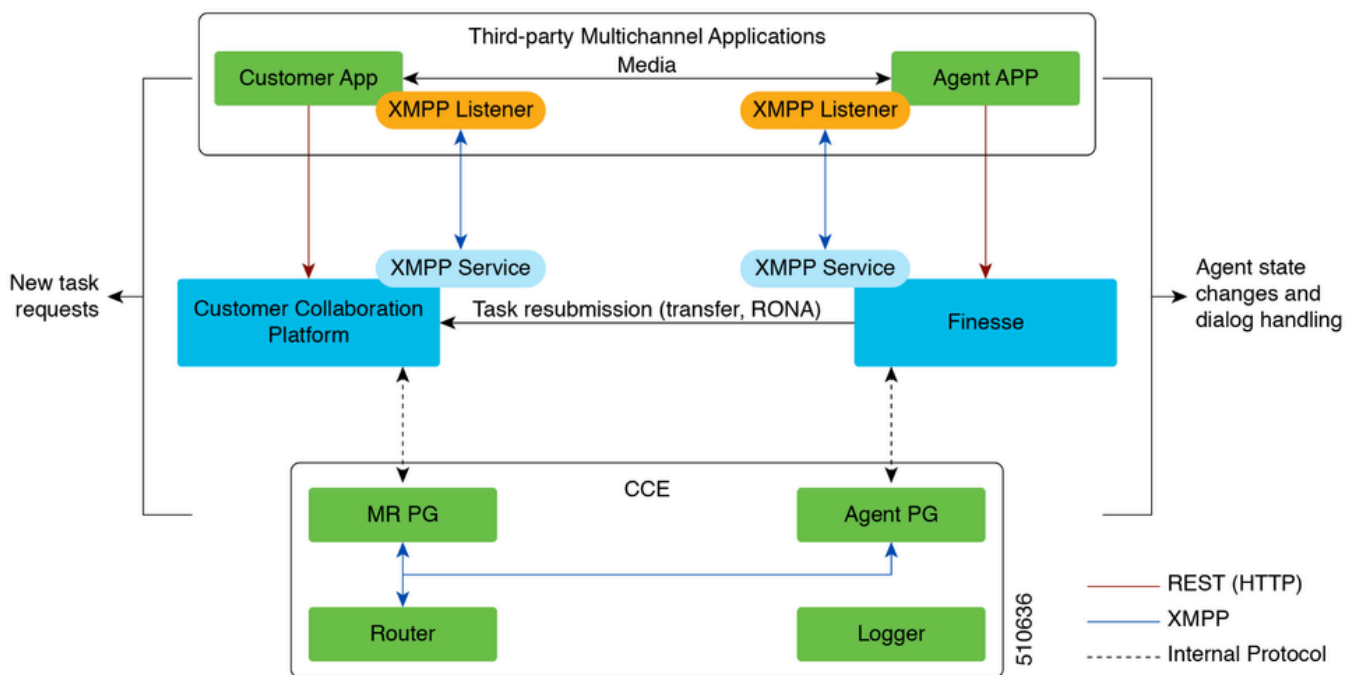
- 要详细跟踪Web服务日志中的任务，请使用以下命令在Finesse Web服务中启用更高的跟踪级别：`utils finesse log configuration update webservices ROOT TRACE`
 - 将日志配置级别更新为DEBUG或TRACE可能会影响Finesse系统的性能。
-

背景信息

任务路由说明系统能够将来自不同媒体信道的请求路由到联系中心中的任何座席。
通过任务路由API与CCE集成，第三方多通道应用可以使用通用队列。
任务路由API提供了一种在CCE中请求、排队、路由和处理第三方多通道任务的标准方法。

CCP和任务路由

第三方多通道应用使用CCP的任务API向CCE提交非语音任务。
API与CCP任务源、活动和通知配合使用，可将任务请求传送到联系中心进行路由。
任务API支持对任务请求使用呼叫变量和ECC变量。使用这些变量可随请求一起发送用户特定信息，包括媒体属性，如聊天室URL或邮件句柄。



日志分析

简单消息流

1. 第三方多通道应用产品将一个NEW_TASK事件发送到MR PG。
2. MR PG使用此NEW_TASK请求并向路由器发送“路由”请求，请求中包含已配置的拨号号码(DN)
3. 根据DN，路由器运行相关脚本并选择可用的代理。
4. 然后，路由器将一个DEVICE_TARGET_PRE_CALL_IND发送给座席PG的opc；在此基础上，ctisvr将座席置于“保留”状态。
 - 同时，路由器还会向MR PG发送CONNECT消息。
5. MR PG现在向应用产品发送DO_THIS_WITH_TASK事件。

6. 应用产品将OFFER_TASK_IND发送给客户，指明为座席提供了任务。

- 作为响应，客户发回OFFER_TASK_EVENT，确认指定的座席已保留以处理指定的任务

7. 然后，应用产品会将START_TASK_IND发送给客户机，指明座席已开始。

- Ctisvr返回START_TASK_EVENT，确认指定的代理已开始处理该任务。

8. 处理这些START_TASK_IND事件时，ctisvr将非语音MRD的座席状态更新为“活动”，并且会话现在处于活动状态。

9. 会话结束后，CTISVR会收到END_TASK_IND消息，指示任务已结束，然后发送END_TASK_EVENT消息作为响应。

非语音媒体路由域(MRD)的座席状态：

- 未就绪-座席已登录到MRD，但处于“未就绪”状态
- NOT ACTIVE -座席已登录到MRD并处于“就绪”状态
- RESERVED (保留) -任务显示给座席。
- 活动-任务已被接受，座席正在积极处理该任务。

CTISVR

<#root>

Agent is logged into Finesse and is in the ready status for Task Management:

08:54:27:874 cg3A-ctisvr Trace: AGENT_EVENT: ID=1080 Periph=5000 Ext=1080 Inst=1080 Sig=Finesse UniqueI

08:54:34:531 cg3A-ctisvr Trace: AGENT_EVENT: ID=1080 Periph=5000 Ext=1080 Inst=1080 Sig=Finesse UniqueI

CCBU-CCPPUBLICAPPS

<#root>

CCPPublicapps submits a SocialContact Create Request to CCBU-Runtime for a new task:

0000000078: 192.168.1.1: Jan 30 2024 08:55:49.233 -0500: %CCBU__CCPPUBLICAPPS-6-REQUEST_INITIATED: %[De

0000000011: 192.168.1.1: Jan 30 2024 08:55:49.235 -0500: %CCBU_____CCPAPI-6-CREATE_SOCIAL_CONTACT: :

CCBU运行时

<#root>

CCBU-Runtime receives the request to create a SocialContact for a new task:

0000000056: 192.168.1.1: Jan 30 2024 08:55:49.243 -0500: %CCBU_____FEEDS-6-MSG_INCOMING_FROM_BUS: :

0000000057: 192.168.1.1: Jan 30 2024 08:55:49.246 -0500: %CCBU_____FEEDS-6-CREATE_SOCIAL_CONTACT: 0

CCBU运行时

<#root>

SocialContact is created and a SocialContactID is generated:

In this step, note down the the SocialContactID and use it to track the task through the rest of the lo

0000000062: 192.168.1.1: Jan 30 2024 08:55:49.272 -0500: %CCBU_____FEEDS-6-SOCIAL_CONTACT_CREATED: 0

0000000063: 192.168.1.1: Jan 30 2024 08:55:49.273 -0500: %CCBU_____FEEDS-6-SOCIAL_CONTACT_PROCESSOR: 0

0000000064: 192.168.1.1: Jan 30 2024 08:55:49.273 -0500: %CCBU_____FEEDS-6-SOCIAL_CONTACT_CREATED: 0

CCBU运行时

<#root>

SocialContact is currently in the unread status:

// Campaign ID and the SocialContact tags are associated with the SocialContact.

0000000140: 192.168.1.1: Jan 30 2024 08:55:49.329 -0500: %CCBU_____CCP-DS-API-6-CCP_DS_API_MESSAGE: Rea

0000000072: 192.168.1.1: Jan 30 2024 08:55:49.343 -0500: %CCBU_____CAMPAIGN-6-RECEIVED_FILTER_SOCIAL_

0000000073: 192.168.1.1: Jan 30 2024 08:55:49.344 -0500: %CCBU_____CAMPAIGN-6-SC_FILTER_CACHE_UPDATE: 0

0000000074: 192.168.1.1: Jan 30 2024 08:55:49.349 -0500: %CCBU_____CAMPAIGN-6-UPDATING_SOCIAL_CONTACT: 0

0000000141: 192.168.1.1: Jan 30 2024 08:55:49.366 -0500: %CCBU_____CCP-DS-API-6-CCP_DS_API_MESSAGE: Rea

0000000047: 192.168.1.1: Jan 30 2024 08:55:49.398 -0500: %CCBU_____NOTIFICATION-6-NOTIFICATION_REQUEST: %

PIM先生

<#root>

MR PIM receives the NEW_TASK event from CCP:

08:55:49:391 PG2A-pim3 Trace: Application->PG:

Message = NEW_TASK; Length = 201 bytes

DialogueID = (4) Hex 00000004

SendSeqNo = (1) Hex 00000001

MRDomainID = Undefined

PreviousTask = -1:-1:-1

PreferredAgent = Undefined

Service = (0) Hex 00000000

CiscoReserved = (0) Hex 00000000

ScriptSelector: CumulusTask

ApplicationString1: ae93f5ad-452d-4c52-8057-8d23864a8a8a

ApplicationString2: 5AA797871000018D0000004139ED7AD5

ServiceRequested = (0) Hex 00000000

MR PIM sends a NEW_CALL event to the Router for this new task:

08:55:49:391 PG2A-pim3 Trace: Send INRCMSGNewCall to Router : :
NEW_CALL RCID=5004 PID=5001 DID=4 DIDRelSeq#=1 GrpDelKey=5004 CRS(RtrDate=-1,RtrCID=-1) RCKSeq#=-1 NICC

RTR

<#root>

Router receives the NewCall event and then runs the associated script, which then picks an available agent

08:55:49:401 ra-rtr Trace: (4 x 0 : 0 0) NewCall: CID=(154526,37051928), DN=CumulusTask, ANI=ae93f5ad-4
08:55:49:401 ra-rtr Trace: (4 x 0 : 0 0) CID=(154526,37051928):CumulusTask:Step 1 sending call to Agent

Once an agent is picked, the Router sends a Device PreCallIndicator message to the cti server in order to r

08:55:49:401 ra-rtr Trace: (4 x 0 : 0 0) DeviceTargetPreCall_V14: CID=(154526,37051928), PerID=5000, PQ
08:55:49:401 ra-rtr Trace: DN=CumulusTask, ANI=ae93f5ad-452d-4c52-8057-8d23864a8a8a, CED=5AA79787100001
08:55:49:401 ra-rtr Trace: RCKSeqNum=0, DelayQTime=0, DelayRouterTime=0, SGDelayQTime=0
08:55:49:401 ra-rtr Trace: CallGUID=, CustomrID=1 ServiceRequested=0
08:55:49:401 ra-rtr Trace: LocationParamPKID=, LocationParamName=, SIPHeader=
08:55:49:401 ra-rtr Trace: NIC_CalledPartyNumber=CumulusTask ECCPayloadID=1
08:55:49:401 ra-rtr Trace: OrigRCCallID{PhyCtrlID=0, RCID=0, DlgID=0x0} OrigOperationType=0

At the same time, Router also sends a CONNECT message to the MR PG:

08:55:49:401 ra-rtr Trace: (4 x 0 : 0 0) Connect: CID=(154526,37051928), EventSelect=0x0, ServiceType=0
08:55:49:401 ra-rtr Trace: (4 x 0 : 0 0) Deleting Dialog.
08:55:50:448 ra-rtr Trace: Agent 5172 from PG domain 5011. [na-0:3[0],RA*] to [res-0+1:3[0],R]

PIM先生

<#root>

MR PIM receives the CONNECT message from the Router and then sends a DO_THIS_WITH_TASK event to the CCP

08:55:49:391 PG2A-pim3 Trace: MR_Peripheral::On_Router_Connect:
CONNECT RCID=5004 PID=5001 DID=4 DIDRelSeq#=0 CRS(RtrDate=154526,RtrCID=37051928) RCKSeq#=0 ErrorCode=0

08:55:49:391 PG2A-pim3 Trace: PG->Application:
Message = DO_THIS_WITH_TASK; Length = 135 bytes
DialogueID = (4) Hex 00000004
SendSeqNo = (1) Hex 00000001
IcmTaskID = 154526:37051928: 1
SkillGroup = (5199) Hex 0000144f
Service = Undefined
Agent = (5172) Hex 00001434
AgentInfo: 5172
Label:
ApplicationString2:
MRDID = (5011) Hex 00001393

Interruptible = (1) Hex 00000001

CTISVR

<#root>

Agent is RESERVED:

08:55:49:391 cg3A-ctisvr Trace: AGENT_EVENT: ID=1080 Periph=5000 Ext=1080 Inst=1080 Sig=Finesse UniqueI

08:55:49:391 cg3A-ctisvr Trace: DEVICE_TARGET_PRE_CALL_IND - Instrument=1080 RouterCallKey=154526 37051

CCBU-CCPAPI

<#root>

SocialContact State = queued:

0000000114: 192.168.1.1: Jan 30 2024 08:55:49.508 -0500: %CCBU_____EVENTING-6-DS_NOTIFICATION_EVENT: 9

0000000115: 192.168.1.1: Jan 30 2024 08:55:49.509 -0500: %CCBU_____EVENTING-6-SOCIAL_CONTACT_PUBLISH_

0000000116: 192.168.1.1: Jan 30 2024 08:55:49.511 -0500: %CCBU_____EVENTING-6-SOCIAL_CONTACT_PUBLISH_

SocialContact State = reserved:

0000000118: 192.168.1.1: Jan 30 2024 08:55:49.573 -0500: %CCBU_____EVENTING-6-DS_NOTIFICATION_EVENT: 9

0000000119: 192.168.1.1: Jan 30 2024 08:55:49.573 -0500: %CCBU_____EVENTING-6-SOCIAL_CONTACT_PUBLISH_

0000000120: 192.168.1.1: Jan 30 2024 08:55:49.574 -0500: %CCBU_____EVENTING-6-SOCIAL_CONTACT_PUBLISH_

WEB服务和CTISVR

<#root>

OFFER_TASK_IND sent to cti server by Finesse:

103624: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:55:58.952 -0500]: [COMMAND_POOL-1-worker-9]: [c

08:55:58:923 cg3A-ctisvr Session 3: MsgType:OFFER_TASK_IND (InvokeID:0x8a88 MRDID:5011 ICMAgentID:5172

08:55:58:923 cg3A-ctisvr Session 3: TaskID:154526/37051928/1ARMSkillGroupID:5199 ARMServiceID:N/A)

08:55:58:923 cg3A-ctisvr Trace: ProcessOfferTaskInd - sessionID 3

08:55:58:923 cg3A-ctisvr Trace: SendARMMsg: ARM_OFFER_TASK_IND-- InvokeID = 35464, ClientInvokeID = 354

SkillGroupID = 5199, ServiceID = -1, SessionID = 3

In response, OFFER_TASK_EVENT is sent to Finesse:

08:55:58:923 cg3A-ctisvr Trace: OFFER_TASK_EVENT: PeripheralID=5000 PeripheralType=4 MRDomainID=5011

08:55:58:923 cg3A-ctisvr Trace: TaskID=154526:37051928:1 ICMAgentID=5172 SkillGroupID=5199
08:55:58:923 cg3A-ctisvr Trace: ServiceID=2671908 ApplicationRouted

WEB服务

<#root>

OfferTaskEvent received by Finesse:

103629: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:55:58.953 -0500]: [EVENT_POOL-1-worker-17]: [c.
103630: [INFO]: [call-id [154526_37051928_1]] [agent-id [1080]]: [Jan 30 2024 08:55:58.954 -0500]: [EVE
103631: [INFO]: [call-id [154526_37051928_1]] [agent-id [1080]]: [Jan 30 2024 08:55:58.954 -0500]: [EVE

Finesse now sends START_TASK_IND to cti server:

104059: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:56:53.772 -0500]: [COMMAND_POOL-1-worker-11]: [

CTISVR

<#root>

START_TASK_IND received from Finesse:

08:56:53:745 cg3A-ctisvr Session 3: MsgType:START_TASK_IND (InvokeID:0x8b47 MRDID:5011 ICMAgentID:5172
08:56:53:745 cg3A-ctisvr Session 3: TaskID:154526/37051928/1ARMSkillGroupID:5199 ARMServiceID:N/A)
08:56:53:745 cg3A-ctisvr Trace: ProcessStartTaskInd - sessionID 3
08:56:53:745 cg3A-ctisvr Trace: SendARMMsg: ARM_START_TASK_IND-- InvokeID = 35655, ClientInvokeID = 356
SkillGroupID = 5199, ServiceID = -1, SessionID = 3

Agent is now in the ACTIVE state:

08:56:53:745 cg3A-ctisvr Trace: AGENT_EVENT: ID=1080 Periph=5000 Ext=1080 Inst=1080 Sig=Finesse UniqueI

START_TASK_EVENT is sent to Finesse:

// Once the agent is moved to the ACTIVE state and the START_TASK_EVENT is sent to Finesse, this is whe
08:56:53:745 cg3A-ctisvr Trace: START_TASK_EVENT: PeripheralID=5000 PeripheralType=4 MRDomainID=5011
08:56:53:745 cg3A-ctisvr Trace: TaskID=154526:37051928:1 ICMAgentID=5172 SkillGroupID=5199
08:56:53:745 cg3A-ctisvr Trace: ServiceID=2671908 ApplicationRouted

WEB服务

<#root>

StartTaskEvent received by Finesse:

104066: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:56:53.774 -0500]: [EVENT_POOL-1-worker-19]: [c.
104067: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:56:53.774 -0500]: [EVENT_POOL-1-worker-19]: [c.
104068: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:56:53.774 -0500]: [EVENT_POOL-1-worker-19]: [c.

When the task is ended, **END_TASK_IND** is forwarded to the cti server by Finesse:

104611: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:58:10.565 -0500]: [COMMAND_POOL-1-worker-13]: [c.

CTISVR

<#root>

END_TASK_IND received from Finesse:

08:58:10:536 cg3A-ctisvr Session 3: MsgType:END_TASK_IND (InvokeID:0x8c2c MRDID:5011 ICMAgentID:5172
08:58:10:536 cg3A-ctisvr Session 3: TaskID:154526/37051928/1ICMDisposition:38 ApplicationDisposition:38
08:58:10:536 cg3A-ctisvr Trace: Decode string length error: element "WrapupData", strlen 0, fieldlen 2
08:58:10:536 cg3A-ctisvr Trace: ProcessEndTaskInd - sessionID 3
08:58:10:536 cg3A-ctisvr Trace: SendARMMsg: ARM_END_TASK_IND-- InvokeID = 35884, ClientInvokeID = 35884
WrapupData = , ApplicationData =
08:58:10:536 cg3A-ctisvr Trace: MDSIO::ProcessOPCMessage: received msgtype 97 (CTI_END_TASK_EVENT) ...

Agent is moved to **NOT_ACTIVE** status and **END_TASK_EVENT** is send back to Finesse:

08:58:10:536 cg3A-ctisvr Trace: AGENT_EVENT: ID=1080 Periph=5000 Ext=1080 Inst=1080 Sig=Finesse UniqueI
08:58:10:536 cg3A-ctisvr Trace: END_TASK_EVENT: PeripherlID=5000 PeripherlType=4 MRDomainID=5011
08:58:10:536 cg3A-ctisvr Trace: TaskID=154526:37051928:1 PreviousTaskID=-1:-1:-1
08:58:10:536 cg3A-ctisvr Trace: ICMAgentID=5172

WEB服务

<#root>

EndTaskEvent received on Finesse from the CTISVR:

104624: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:58:10.568 -0500]: [EVENT_POOL-1-worker-16]: [c.

END_TASK_EVENT_HANDLER update sent to the Finesse client:

104625: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:58:10.568 -0500]: [EVENT_POOL-1-worker-16]: [c.
104626: [INFO]: [call-id [154526_37051928_1]] [agent-id [1080]]: [Jan 30 2024 08:58:10.569 -0500]: [EVE
104627: [INFO]: [call-id [154526_37051928_1]] [agent-id [1080]]: [Jan 30 2024 08:58:10.569 -0500]: [EVE

Finesse now makes a REST call to CCP for the EndTask event:

104632: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:58:10.569 -0500]: [SM-TASK-NOTIFIER-POOL-1]: [c

CCP returns a successful response indicating that the SocialContact is closed and marked as Handled:

104633: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:58:10.679 -0500]: [SM-TASK-NOTIFIER-POOL-1]: [c

104634: [INFO]: [call-id] [agent-id]: [Jan 30 2024 08:58:10.679 -0500]: [SM-TASK-NOTIFIER-POOL-1]: [c

CCBU-CCAPI

<#root>

CCP receives a request from Finesse to close the SocialContact:

0000001461: 192.168.1.1: Jan 30 2024 08:58:10.641 -0500: %CCBU_____CCPAPI-6-REST_API_INFO: CONTACT_

SocialContact status is updated to Handled:

0000001462: 192.168.1.1: Jan 30 2024 08:58:10.650 -0500: %CCBU_____CCPAPI-6-REST_API_INFO: CONTACT_

0000000165: 192.168.1.1: Jan 30 2024 08:58:10.655 -0500: %CCBU_____CCP-DS-API-6-CCP_DS_API_MESSAGE: Wri

0000000166: 192.168.1.1: Jan 30 2024 08:58:10.665 -0500: %CCBU_____CCP-DS-API-6-CCP_DS_API_MESSAGE: Rea

0000001463: 192.168.1.1: Jan 30 2024 08:58:10.676 -0500: %CCBU_____CCPAPI-6-REST_API_INFO: CONTACT_

0000000121: 192.168.1.1: Jan 30 2024 08:58:10.680 -0500: %CCBU_____EVENTING-6-MSG_INCOMING_FROM_BUS: %

0000000122: 192.168.1.1: Jan 30 2024 08:58:10.694 -0500: %CCBU_____EVENTING-6-DS_NOTIFICATION_EVENT: %

0000000034: 192.168.1.1: Jan 30 2024 08:58:10.694 -0500: %CCBU_____MSGPROXY-6-MSG_INCOMING_FROM_BUS: %

0000000123: 192.168.1.1: Jan 30 2024 08:58:10.694 -0500: %CCBU_____EVENTING-6-SOCIAL_CONTACT_PUBLISH_

0000000124: 192.168.1.1: Jan 30 2024 08:58:10.696 -0500: %CCBU_____EVENTING-6-SOCIAL_CONTACT_PUBLISH_

下载CCP日志

使用RTMT

Collect Files

Select CCP Services/Applications

Select all Services on all Servers

Name	All Servers
CCP Chat Gateway Service	<input type="checkbox"/>
CCP Datastore Service	<input type="checkbox"/>
CCP Indexer Service	<input type="checkbox"/>
CCP Migration	<input type="checkbox"/>
CCP ORM Service	<input type="checkbox"/>
CCP Public REST API	<input type="checkbox"/>
CCP REST API	<input type="checkbox"/>
CCP Runtime Service	<input type="checkbox"/>
CCP XMPP Server Service	<input type="checkbox"/>

使用CCP命令行

列出目录和文件：

```
<#root>
```

```
file list activelog mmca/logs/*
```

OR

```
file list activelog mmca/logs/* detail
```

admin:

```
file list activelog mmca/logs/*
```

```
<dir> ccp-chat-gateway
```

```
<dir> ccp-ds-indexer
```

```
<dir> ccp-ds-storage
```

```
<dir> ccp-xmpp-server
```

```
<dir> ccpapi
```

```
<dir> ccppublicapps
```

```
<dir> certMgmt
```

```
<dir> orm
```

```
<dir> runtime
```

```
<dir> tomcat
```

```
informix-stats.out install_report_server.sh.out
```

```
mmca-drs-reg.log sm1_mmca_dbsetup.log
```

```
dir count = 10, file count = 4
```

下载日志文件：

```
admin:file get activelog ?
Syntax:
file get activelog file-spec [options]
file-spec    mandatory    file to transfer
options      optional      reltime months|weeks|days|hours|minutes timevalue
                                abstime hh:mm:MM/DD/YY hh:mm:MM/DD/YY
                                match regex
                                recurs
                                compress
```

<#root>

CCP Chat Gateway Service

```
file get activelog mmca/logs/ccp-chat-gateway/*
```

CCP Datastore Service

```
file get activelog mmca/logs/ccp-ds-storage/*
```

CCP Indexer Service

```
file get activelog mmca/logs/ccp-ds-indexer/*
```

CCP ORM Service

```
file get activelog mmca/logs/orm/*
```

CCP Public REST API

```
file get activelog mmca/logs/ccppublicapps/*
```

CCP REST API

```
file get activelog mmca/logs/ccpapi/*
```

CCP Runtime Service

```
file get activelog mmca/logs/runtime/*
```

CCP XMPP Server Service

```
file get activelog mmca/logs/ccp-xmpp-server/*
```

CCP Tomcat

```
file get activeLog mmca/logs/tomcat/*
```

相关信息

12.6(1)

[UCCE功能指南-任务路由](#)

12.6(2)

[UCCE功能指南-任务路由](#)

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