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## Scenario Setup

Use integrated agent "goofy" for this scenario. (Do not log in yet)

Throughout the life of the mail, use the below query to follow the activity:

```
select top(10) egpl_routing_queue.queue_name, * from egpl_casemgmt_activity LEFT OUTER JOIN egpl_r
```

## Problem Statement

Understand how a mail goes through the Integrated Routing Engine.

## Standalone Routing Engine

Once an email activity enters the 4000/4100 state, it is routed to an agent within a few seconds.

## Integrated Routing Engine - EAAS to MR PIM

### NEW\_TASK

The External Agent Assignment Service (EAAS) then picks up the activity in activity\_status/activity\_sub\_status 4000/4100, sets activity\_sub\_status to 4105, and processes the task through a UCCE Routing Script via a NEW\_TASK message sent to the MR PIM.

```
12:42:34:878 pg2A-pim2 Trace: [ 4900]Application->PG:
Message = NEW_TASK; Length = 102 bytes
  DialogueID = (1) Hex 00000001
  SendSeqNo = (1) Hex 00000001
  MRDomainID = (5003) Hex 0000138b
  PreviousTask = -1:-1:-1
  PreferredAgent = Undefined
```

## IPTA\_Email

```
Service = (0) Hex 00000000
CiscoReserved = (0) Hex 00000000
ScriptSelector: 8000
ECC Variable Name: user.cim.activity.id
Value: 1178
```

The activity\_sub\_status remains 4105 ("Ready for Unified CCE routing") while the task is queued.

queue_name	ACTIVITY_ID	CASE_ID	DEPARTMENT_ID	ACTIVITY_MODE	ACTIVITY_TYPE	ACTIVITY_SUB_TYPE	ACTIVITY_STATUS	ACTIVITY_SUB_STATUS	ACTIVITY_PRIORITY	WHEN_CREATED	WHO_CREATED
EIM_INBOUND	1178	1081	999	100	1	1	4000	4105	NULL	2011-05-16 16:42:04.973	12

## Login and go "ready for other channels."

Your integrated agent should receive the email sent in the previous scenario.

## DO\_THIS\_WITH\_TASK

Once UCCE determines an agent is available for the task, MR PIM returns a DO\_THIS\_WITH\_TASK message to EAAS with routing instructions.

```
12:42:35:722 pg2A-pim2 Trace: [ 5356]PG->Application:
Message = DO_THIS_WITH_TASK; Length = 121 bytes
DialogueID = (1) Hex 00000001
SendSeqNo = (1) Hex 00000001
IcmTaskID = 149884:201: 1
SkillGroup = (5036) Hex 000013ac
Service = Undefined
Agent = (5005) Hex 0000138d
AgentInfo: 1002
Label:
ApplicationString2:
Call Variable 1:
Call Variable 2:
Call Variable 3:
Call Variable 4:
Call Variable 5:
Call Variable 6:
Call Variable 7:
Call Variable 8:
Call Variable 9:
Call Variable 10:
ECC Variable Name: user.cim.activity.id
Value: 1178
```

## DialogueID

Note the DialogueID in the above messages. This field can be used to correlate messages MR PIM logs, and is particularly useful for those that do not show the user.cim.activity.id ECC variable.

- Assume we find a NEW\_TASK\_FAILURE\_EVENT in the MR PIM logs:

```
01:07:52 pg5A-pim1 Trace: PG->Application:
Message = NEW_TASK_FAILURE_EVENT; Length = 12 bytes
DialogueID = (683) Hex 000002ab
SendSeqNo = (1) Hex 00000001
ReasonCode = (209) Hex 000000d1
```

- This can be linked to the original NEW\_TASK with the DialogueID:

NEW\_TASK

## IPTA\_Email

```
12:11:32 pg5A-pim1 Trace: Application->PG:
Message = NEW_TASK; Length = 73 bytes
  DialogueID = (683) Hex 000002ab
...etc
```

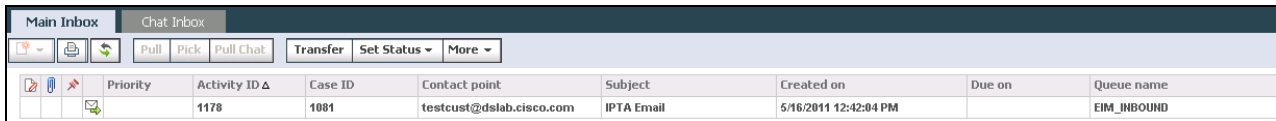
- Note that the DialogueID can also be used to link the DO\_THIS\_WITH\_TASK:

```
12:11:32 pg5A-pim1 Trace: PG->Application:
Message = DO_THIS_WITH_TASK; Length = 63 bytes
  DialogueID = (683) Hex 000002ab
...etc
```

## Listener to CTI Server

### Offer Task

When a ready agent is offered the task, the activity appears as a bold line in the Main Inbox. The activity\_status is 5000 and activity\_sub\_status is 5100 ("New").




The screenshot shows a 'Main Inbox' interface with a table of activities. The first activity is highlighted in bold text. The table has columns for Priority, Activity ID, Case ID, Contact point, Subject, Created on, Due on, and Queue name.

Priority	Activity ID	Case ID	Contact point	Subject	Created on	Due on	Queue name
	1178	1081	testcust@dslab.cisco.com	IPTA Email	5/16/2011 12:42:04 PM		EIM_INBOUND

queue_name	ACTIVITY_ID	CASE_ID	DEPARTMENT_ID	ACTIVITY_MODE	ACTIVITY_TYPE	ACTIVITY_SUB_TYPE	ACTIVITY_STATUS	ACTIVITY_SUB_STATUS	ACTIVITY_PRIORITY	WHEN_CREATED	WHO_CREATED
EIM_INBOUND	1178	1081	999	100	1	1	5000	5100	NULL	2011-05-16 16:42:04.973	12

### Start Task

The task is not "started" until the agent clicks the activity in their Main Inbox and it changes from bold to regular text. The activity\_status is 5000 and activity\_sub\_status is 5900 ("In Progress").



The screenshot shows the same 'Main Inbox' interface as before, but the activity is now in regular text. The table structure is identical to the previous screenshot.

Priority	Activity ID	Case ID	Contact point	Subject	Created on	Due on	Queue name
	1178	1081	testcust@dslab.cisco.com	IPTA Email	5/16/2011 12:42:04 PM		EIM_INBOUND

queue_name	ACTIVITY_ID	CASE_ID	DEPARTMENT_ID	ACTIVITY_MODE	ACTIVITY_TYPE	ACTIVITY_SUB_TYPE	ACTIVITY_STATUS	ACTIVITY_SUB_STATUS	ACTIVITY_PRIORITY	WHEN_CREATED	WHO_CREATED
EIM_INBOUND	1178	1081	999	100	1	1	5000	5900	NULL	2011-05-16 16:42:04.973	12

### End Task

Once the agent types a response and completes the activity, the activity\_status changes to 9000 and activity\_sub\_status to 9100 ("Done").

queue_name	ACTIVITY_ID	CASE_ID	DEPARTMENT_ID	ACTIVITY_MODE	ACTIVITY_TYPE	ACTIVITY_SUB_TYPE	ACTIVITY_STATUS	ACTIVITY_SUB_STATUS	ACTIVITY_PRIORITY	WHEN_CREATED	WHO_CREATED
EIM_INBOUND	1178	1081	999	100	1	1	9000	9100	NULL	2011-05-16 16:42:04.973	12

## Audit Trail

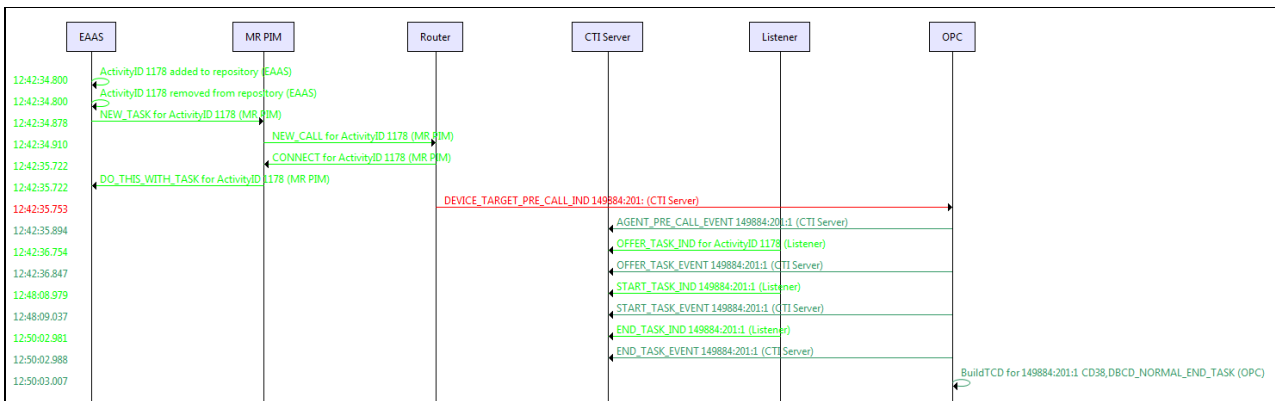
1. Log in to the UI as an agent
2. Click "Search"
3. Select Object Type > Activity
4. Enter activity\_id in the value box, press enter
5. Click Start Search

Properties: 1178

Activity body | Activity details | Case details | Audit | Classification

Actor	Action	Date
system	New incoming mail	5/16/2011 12:42:05 PM
system	New case created	5/16/2011 12:42:22 PM
system	Activity assigned to new case 1081	5/16/2011 12:42:22 PM
system	Assigned to queue EIM_INBOUND	5/16/2011 12:42:22 PM
system	Auto acknowledged	5/16/2011 12:42:22 PM
system	Applied inbound workflow DSLab Inbound Workflow	5/16/2011 12:42:22 PM
system	Assigned to JDoe	5/16/2011 12:42:38 PM
JDoe	Read in progress	5/16/2011 12:48:10 PM
JDoe	Replied	5/16/2011 12:50:02 PM
JDoe	Activity completed	5/16/2011 12:50:02 PM

## Call Flow



## Resolution

- Integrated email routing is handled through the EAAS-MRPIM connection.
- EAAS sends a NEW\_TASK to MR\_PIM which is processed through a UCCE routing script.
- MR PIM returns a DO\_THIS\_WITH\_TASK message to EAAS with routing instructions.
- Listener-CTI Server connection updates task status and agent availability