General Trouble shooting Tips:

1) When "CallType RealTime" Tracing is enabled in router logs, Similar message would be seen for the Call_Type being initialized, when the call was answered and also handling the TCD from OPC if it is enabled. Logs with CallType RealTime tracing. 21:45:37 Trace: CT_SL_Timer(40)(Init): CT(5000,CT_1), Threshold(15 + 2). ?. 21:45:43 Trace: CT_SL_Timer(40), CT(5000,CT_1), DeleteSelf(0). 21:45:43 Trace: CountCallsAnswered: AnswerWaitTime = 3. ?? 21:45:47 Trace: Handling ClosedCallRecord_V11: RCK(149494-223), CallType(5000,CT_1). 21:45:47 Trace: Handling TCD: CallType(5000,CT_1), SLTimer ID(40), disposition (13) 21:45:47 Trace: CT_SL_Timer(40)(delete), CT(5000,CT_1).

2) When multiple processes' logs and tables are collected, make sure all of them are available to the DE for the same time frame when the issue occurs. Make sure to turn off the tracing mentioned after the logs are collected.

3) Check the ICM version and if any ES installed.

4) Refer to the following link:

Router:
http://ework.cisco.com/Livelink/livelink.exe/fetch/-2099362/7899926/12514483/router.html?nodeid=12518757&vernum=

VRUPIM:
http://ework.cisco.com/Livelink/livelink.exe/fetch/-2099362/7899926/VRU_PIM_knowledge_base.html?nodeid=1537358

ICM: http://docwiki.cisco.com/wiki/Category:Troubleshooting

Symptom/Observation / Issues	Initial Analysis Checklist	Resolution Steps/Data Collection Inputs/Things to do by TAC
Router assert/crash/restarted		1) Collect the router.exe, .pdb ,minidump file and router logs for that time frame. 2) Analyze the logs to see if router has hit a EMSFailAssert point before the cras defects or cases using the CallStack printed on the router logs as the search string command, this might help the analysis if the crash if due to a configuration chang http://www.cisco.com/en/US/products/sw/custcosw/ps1001/products_tech_note0
Routing issues	1) Call flow of the customer.	
	Problems with Label (Agent) selection in IPCC?VRU and Label related problems?	1) Check if the label is configured for the correct Routing Client. In case of routi configured under Devicetarget Explorer / Agent targeting Rule. In case of Routing to VRU, check the label configured under Network VRU Exp used (Send to VRU /TransRouteToVRU) check the call flow along with the Type Configuring a Type 10 VRU, do not select the NewtworkVRU on the Advance ta 2) On any issue with the customer's configuration, take a back up of the Logger I Refer to the link for more info
	Router becomes unresponsive	Look for any RTS restarts that happened during the timeframe of the pause. If so Time Update Fix(7.2.6 upwards) HKLM\Software\Cisco System,Inc.\<inst>\Router<side>\Router\CurrentVersion\RealTimeData\PartialU

	and appears to not processing any messages for ~ seconds (Determined from Router Logs)	Threshold: If threshold is set to 0, router will send all of the real time data at once the default value is 500ms. If it is set to 0, router will send all of the real time dat

If there are no RTS restart, then we need to have MDS Metering Registry enabled Router(HKEY_LOCAL_MACHINE\SOFTWARE\Cisco Systems, Inc.\ICM\<in name>\Router<side>\Router\CurrentVersion\Debug\EnableMDSMetering), which to process messages. This MDS meters will be logged after every 1 minute by De enabling registry to 1. However, in 7.5 upwards the Registry is not just to enable/ interval at which the Meters need to be dumped. A non-zero value would determi Meters. A value of 0, would disable MDS Metering. After it is enabled, you will following format: MDSMessageClass, MDSMessageType, MessageCount, Total AvgCPUSeconds ,max time, max message size , Total Bytes |
| Scripteditor crash/problems. | Script/IS Editor crash? | 1) Event viewer logs and edt logs(tracing ffff) |
| | Scripting problems? Script problems due to config issues? Script validation problems? | 1) Check if the issue is specific to Script Editor or is it applicable to ISE also.

2) Does it happen on Client AW also, if yes, are the versions different in both dis |
| VRUPIM Problems | VRU PIM crash/Restart? | Collect the event viewer logs, vrupim logs Collect the router.exe, .pdb ,minidump info(any ES installed) |
| | Translation route to VRU failures? | Check for "Consider if" condition on the TransRouteToVRU node (if used).Enab set of logs to see if the trunks status is reported to the Router. |
| | Connectivity between the VRU and the VRU PIM | Enable the EMSUserData of the VRUPIM to hex 7F F7 E0

EMSTraceMask is not used and should be set to 0. Check for the Heartbeat mess VRUCAP files which would capture the messages between the PIM and the VRU VRUCAP files. http://www.cisco.com/en/US/products/sw/custcosw/ps1001/products_tech_note0 |
| | VRU-VRUPIM related issue | Refer to the below document for any VRUPIM/VRU related issue:

http://wwwin-eng.cisco.com/Eng/CCBU/ICM/Components/PG/PIMs/VRU/Cust |
| Reporting issues | Discrepancy In Reporting | Watch commands can be enable on router logs using the rttest utility to watch a p or decremented.

1) For example to see the variables associated with a Skill Group, run rttest utility command dump_vars /group <Skill group's Skill target ID given in the logger DE for which the watch command can be enabled. Use "dump_vars /?" to know on w be used. 2) Here is an Example of a Watch on a Skill group's one of the variable (RouterCallsOfferedHalf) watch SkillGroup.<Skill group name>.RouterCallsOff refer to http://www.cisco.com/en/US/products/sw/custcosw/ps1001/products_tec Half Hour reporting issues, collect table from the Logger/HDS. 4) For Real Time from AWDB. 5) The below information on CallType and Skill group reporting, v |
| | Skill Group Reporting | 1) Skill Group Reporting is done by the PG except for the Service Level Calculat

2) Collect the TCD, RCD, and the corresponding Skill Group table Report(half H |

	Call Type Reporting	1) For CallType "Offered" field is incremented by router. 2) Fields like handled and abandoned (their respective service level calculation) flag) cut by the PG. Refer to the DB Schema for Call disposition. Call values. 3) time input from the PG.
	Tracing	CallType: From RtrTrace enable- Route Request, Translation Route, Call Queuin Tracing. From rttest, enable the appropriate watch commands on the fields that have an iss
DBlookup issues.	DBWorker not connecting to DB	1) Refer to the following link on how to setup Login Credentials for external data Process. http://www.cisco.com/en/US/products/sw/custcosw/ps1001/products_tech_note0 http://www.cisco.com/en/US/products/sw/custcosw/ps1001/products_tech_note0 2) A common mistake which is made is to give the External Database Server's IP DBLookUp Explorer Tool through Configuration Manager) and/or the Registry u "HKEY_LOCAL_MACHINE\SOFTWARE\Cisco Systems, Inc.\ICM\<instance name>\Router<side>\Router\CurrentVersion\Configuration\Database\SQLLogin Please make sure that this should be given as Servername and Servername alone. would cause the DBWorker to fail connecting to the External DB.
	DBLookup Node failing	1) Check the DbWorker logs for any errors. 2) Make sure to have the primary key column specified in the DBLookUp Explor
		For all the issues, Collect the DBWorker logs with ffff tracing enabled and corres Viewer logs.
Application Gateway Lookup issues.	AppGateway Process not connecting to the Application.	1) Collect the AppGW (AGI) logs with ffff tracing enabled and router logs with (ICM side. From the Application side, collect the AGI Host logs with ffff tracing (message request/response is received. 2) In Application Gateway List on the ICM Configuration manager make sure to Appgateway Lookup against Remote ICM which is used in cases of NAM/CICM port number given with the IP Address on the Connection Tab on the Application Application Gateway port number on the Host machine given under Cisco ICM (