Loway presents

Troubleshooting: Sending commands to the PBX

Sending commands to the PBX

If you are trying to send commands to the PBX through QueueMetrics, but nothing happens, there is probably an issue with the AMI connection between QueueMetrics and the PBX.

The AMI Interface

Asterisk offers an external command interface called AMI "Asterisk Manager Interface". QueueMetrics takes advantage of this interface to send commands to the PBX in different situations, for example to log an agent on a queue.

In the following steps, we will take a look at the different parts you need to set up in order to send commands to the PBX correctly.

Here you can find all the troubleshooting tutorials.

Asterisk Manager Users

To use the AMI Interface, QueueMetrics needs to be recognized by the PBX. In order to allow this, we need to create a dedicated Asterisk Manager User on our PBX. In the picture we can see how to create one on a FreePBX machine.

Asterisk Manager

Manager queuemetrics		List Managers
General Permissions		+ Add Manager

Manager name ❓	queuemetrics	
Manager secret ❓	•••••••	👁
Deny ❓	0.0.0.0/0.0.0.0	
Permit ❓	127.0.0.1/255.255.255.0&10.10.5.185/255.255.255.0	
Write Timeout ❓	100	milliseconds

When we create an Asterisk Manager User, we need to give it all the permissions in order to allow QueueMetrics to be able to control the agents and the calls on the PBX.

Permission	Read		Write	
system	Yes	No	Yes	No
call	Yes	No	Yes	No
log	Yes	No	Yes	No
verbose	Yes	No	Yes	No
command	Yes	No	Yes	No
agent	Yes	No	Yes	No
user	Yes	No	Yes	No
config	Yes	No	Yes	No
dtmf	Yes	No	Yes	No
reporting	Yes	No	Yes	No
cdr	Yes	No	Yes	No
dialplan	Yes	No	Yes	No
originate	Yes	No	Yes	No
Toggle All	Yes	No	Yes	No

NOTE: If the QueueMetrics machine is on a different machine than the PBX, you will need to allow the specific IP Address of the QueueMetrics Machine (as shown in the first picture).

Configuring the connection

Once you have created the Asterisk Manager User, you need to setup the AMI User on the QueueMetrics. This way QueueMetrics will know to use this user when connecting to the PBX.

In order to do this, go to "Edit System Parameters" from QueueMetrics' Home Page, and set the following property:

```
callfile.dir=tcp:AMIUSER:AMIPASSWORD@PBXIPADDRESS:5038
```

for example:

```
callfile.dir=tcp:queuemetrics:password@127.0.0.1
```

This will tell QueueMetrics where to find the PBX, and how to connect to it.

Classic Mode vs DirectAMI Mode

QueueMetrics offers two different modes of using the AMI Connection to send commands to the PBX.

The first mode is called "Classic" mode. The way this mode works, is by sending an originate command through the AMI connection, that activates a specific part of QueueMetrics' custom dialplan on the PBX. This mode is not the default mode anymore, and we recommend you do not use it unless there is a specific reason.

The second mode is called "DirectAMI" mode. This mode leverages the commands that Asterisk offers directly, without using the QueueMetrics dialplan. We recommend you use this mode as it is more stable.

To find out what mode you are using, check the value of the following parameter in the "Edit System Parameters" page.

```
platform.pbx=CLASSIC
```

or

```
platform.pbx=DIRECTAMI
```

AMI Tester

Once you have setup the AMI connection parameters, you can test if the connection actually works, by using the AMI Tester.

The AMI Tester is a built-in functionality that QueueMetrics offers, to check if the AMI Connection is working.

Test Asterisk Manager connectivity and dialplan

AMI configuration currently found

Property	Manager	
callfile.dir	tcp:admin:amp111@127.0.0.1	Test
cluster.aleph.manager	tcp:admin:amp111@127.0.0.1	Test

Test manually

AMI login:	
AMI password:	
Asterisk server:	
AMI port:	
	Test

DbTest QM Home

AMI tester

AMI test status

Status	
	AMI URL: tcp:admin:amp111@127.0.0.1:5038
	callfile.agentremovemember_ht is OK
	Skipping check for $EM@from-internal
	callfile.monitoring is OK
	callfile.transfercall is OK
	callfile.agentunpause_ht is OK
	Skipping check for $EM@from-internal
	callfile.customdial is OK
	callfile.hangupcall is OK
	callfile.agentpause is OK
	callfile.agentremovemember is OK
	callfile.agentaddmember_ht is OK
	callfile.calloutcome is OK
	callfile.agentpause_ht is OK
	Skipping check for $EM@from-internal
	callfile.outmonitoring is OK
	callfile.agentunpause is OK
	callfile.agentaddmember is OK
OK	Asterisk dialog was OK
	AMI Dialog took 4002 ms

NOTE: If you see a lot of ERR results, it probably means that the QueueMetrics dialplan is missing. This is important only if you are using Classic mode. If the dialplan is missing you can contact QueueMetrics support at support@loway.ch to ask for the most recent version. If you are using DirectAMI mode, then you can ignore the missing dialplan, but make sure that the following message is displaying at the end.

OK	Asterisk dialog was OK

If you see this error:

ERR	Problem: AMI query failed

It could mean that there is a network issue between the QueueMetrics and the PBX, or that the parameters we have setup until now are not correct.

NOTE: The AMI Tester will not be present on a QM-Live or in a QueueMetrics for Yeastar installation.

QueueMetrics References

For more technical information about QueueMetrics call center solution please refer to the User Manual.

Visit www.queuemetrics.com for a 30 days full featured trial.

Attend our Free Webinars for a live demonstration of QueueMetrics.