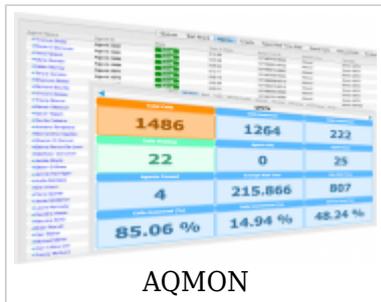


Home  
PBXware  
SERVERware  
TELCOware  
SIPmon  
SIPProt  
Desktop & Mobile  
BRM  
UADs  
Appliances  
EOL

## From Bicom Systems Wiki

AQMON is a call center application that allows supervisors to monitor agent activity. Using AQMON supervisors can determine a variety of things about agents such as: who is on call, who is calling, who is being called, who is paused, how long each agent stays in one state (one call, idle, etc.) ; as well as take control of calls by listening in, hanging up, or transferring. In addition supervisors using AQMON may monitor queues to see how many callers are waiting. It is even possible to generate real-time graphs for a quick glance at the data.



AQMON

In order to use AQMON, you must use the AQPTool.

You can use any extension to log into the AQPTool.

Once in the AQPTool, fill in all the required information for AQMON, including:

1. The extension/secret (Please note that you need to enable "Monitor Queues" for extension otherwise you will not be able to use AQMON).
2. Server
3. Various Permissions (which agents and monitors should be monitored, which information should be displayed, etc.)



# Contents

- 1 Installation Guide
- 2 AQPTool Installation Guide
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  - 4.5 Agent Real Time Statistics
  - 4.6 Queue Calls
  - 4.7 Inbound Calls
  - 4.8 Outbound Calls
  - 4.9 Assistance Requests
  - 4.10 Messages
  - 4.11 Alerts
  - 4.12 Supervisor
- 5 Troubleshooting

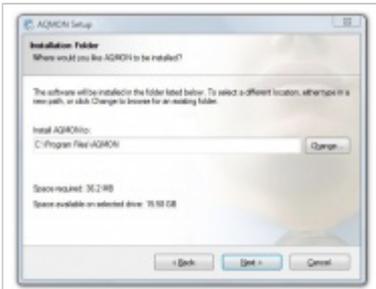
## Installation Guide

STEP 1. Download the Aqmon application from Bicom Systems.

STEP 2. Run the .exe Setup file. On the Welcome window, press NEXT.

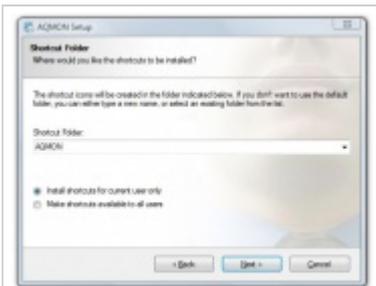


STEP 3. Select a folder in which to install AQMON and press NEXT.



AQMON Setup

STEP 4. Press NEXT.

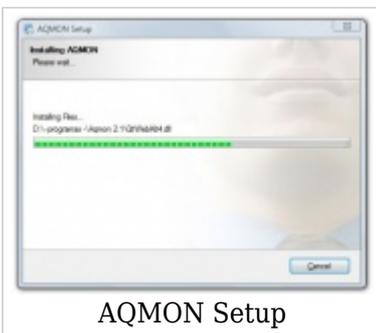


AQMON Setup

STEP 5. Review the configuration and press NEXT.



STEP 6. Wait while the application installs.

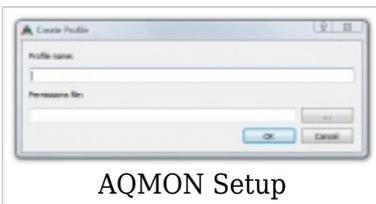


STEP 7. When the installation Successful screen appears, press FINISH.



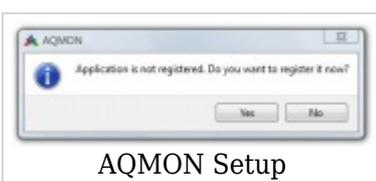
AQMON Setup

STEP 8. Enter your Profile Name and Permissions File (to learn how to obtain a Permissions File read the AQPTool Installation Guide below) and press OK.



AQMON Setup

STEP 9. Select YES to register the application.



AQMON Setup

STEP 10. Enter the License Number provided to you by Bicom Systems and press OK.



STEP 11. Press OK and AQMON is ready to use!



# AQPTool Installation Guide

STEP 1. Download the AQPTool application from Bicom Systems.

Step 2. Run the .exe Setup file. On the Welcome window, press NEXT.



STEP 3. Select a folder in which to install the AQPTool and press NEXT.



STEP 4. Press NEXT.



AQPTool Setup

STEP 5. Review the configuration and press NEXT.



AQPTool Setup

STEP 6. Wait while the application installs.



AQPTool Setup

STEP 7. When the Installation Successful screen appears, press FINISH.



AQPTool Setup

STEP 8. When the AQPTool opens up, enter your Serve, Extension, and Secret to connect.



AQPTool Setup

# Features

## Full Screen View

Application can be set to full screen view - usually used in environments where a large LCD is used in call center organizations.

The image shows a screenshot of the 'AQPTool Performance' dashboard. It displays two columns of metrics: 'Queue' and 'Reception'. Each column has a 'Calls Waiting' section at the top with a value of 0. Below this are four rows of metrics, each with a header and a value.

Queue		Reception	
Calls Waiting	Calls Waiting	Calls Waiting	Calls Waiting
0	0	0	0
Total Calls	Received Calls	Total Calls	Received Calls
234	230	64	28
Agents Logged In	Agents Busy	Agents Logged In	Agents Busy
35	25	1	0
Agents Idle	Agents Not Ready	Agents Idle	Agents Not Ready
1	9	1	0

## Monitor Slide Show

Queue monitoring can be set as a slide show, as well as the slide show interval in seconds.



Queue 0		Queue 1	
Unanswered Calls	0	Unanswered Calls	1
Answered Calls	43	Unanswered Calls	177743
Agents	2	Answered Calls	175574
Agents Not Ready	1	Agents	0
		Agents Not Ready	0

## Queue Monitoring Permissions

Queue monitoring permissions restrict which queue a given user can monitor.

## Total Calls

Displays the number of total of calls received during an ongoing work day.



Total Calls
222

## Answered Calls

Displays the total number of answered calls during an ongoing work day.



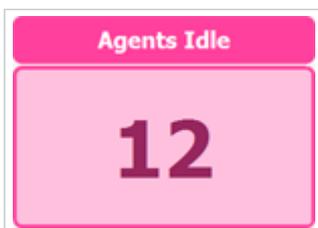
### **Agents Busy**

Displays the total number of agents currently busy.



### **Agents Idle**

Displays the total number of agents currently not busy and waiting for an incoming call.



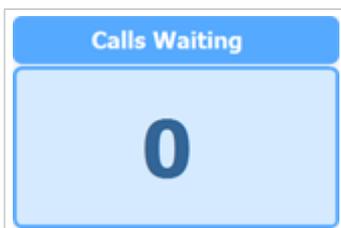
### **Agents Not Ready**

Displays the total number of agents logged in but not currently ready to accept an incoming call.



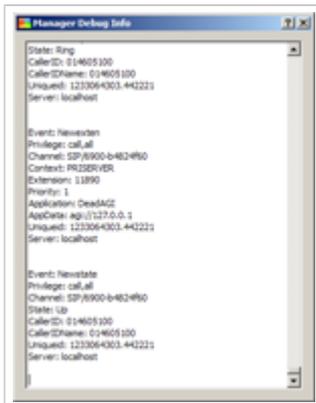
### **Calls Waiting**

Displays the total number of calls waiting in the queue to be answered by the next free agent.



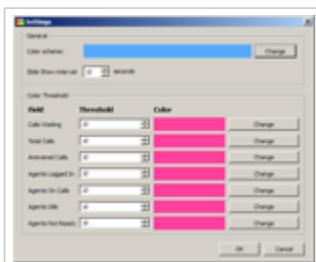
## Manager Output

Manager system output is a useful tool for troubleshooting and debugging. This option is designed for administrators.



## Color Threshold

Used to define which colour should be used for a particular event if the number is larger than zero.



## Show Queues

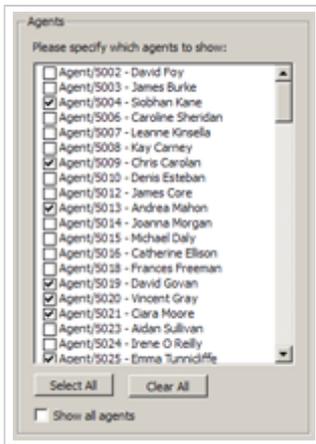
Select all or a particular queue to be shown.



The image shows a dialog box titled "Queues". Inside the dialog, there is a text prompt "Please specify which queues to show:". Below this prompt is a list of four items, each with a checkbox: "11890" (unchecked), "Corporate" (checked), "Q118900" (unchecked), and "Reception" (checked). At the bottom of the dialog, there are three controls: a "Select All" button, a "Clear All" button, and a checkbox labeled "Show all queues" which is currently unchecked.

## Show Agents

Select all or particular agent(s) to be monitored.



## Agent Name

Shows agent name.



## Extension Number

Shows agent's extension number.

Extension
Agent: 5018
Agent: 5035
Agent: 5039
Agent: 5051
Agent: 5066

## State

Shows agents' current status, e.g. "Not Ready" , "Idle" , or "Talking".

State
Not Ready
Idle
Idle
Talking
Talking

## Caller ID

Shows caller ID, number dialing the queue.

CallerID (Queue)
-----
-----
0429662772 (11890)
0879319596 (11890)
0879064372 (11890)

### **Time in State**

Shows agent's time in current call.

Time in State
0:10:40
0:00:56
0:00:02
0:00:06
0:00:11

### **Waiting Caller**

Shows the total number of callers waiting in a particular queue.

Waiting
0
0
0
0
0

### Agents Logged In

Shows the total number of agents currently logged into a particular queue.

Agents Logged In
0
20
20
0
0

### Agents on a call

Shows the total number of agents currently on a call.

Agents On Call
0
6
6
0
0

### Agents Idle

Shows the total number of agents currently idle.

Agents Idle
0
12
12
0
0

### Agents Not Logged

Shows the total number of agents not logged into a particular queue compared to the total number of agents assigned to that queue.

Agents Not Logged
0
100
90
4
1

### Agents Not Ready

Shows the total number of agent not ready to receive an incoming call.

Agents Not Ready
0
2
2
0
0

### Threshold

Item	Icon	Color
Front		
Call Waiting	(Red x2)	Double click to change color
Call Unanswered (30)	(Red x2)	Double click to change color
Max Wait Time	(Red x2)	Double click to change color
Members Pending	(Red x2)	Double click to change color
AMR	(Red x2)	Double click to change color
Members Busy	(Red x2)	Double click to change color
Service Level (30)	(Red x2)	Double click to change color
Call Offered	(Red x2)	Double click to change color
Call Answered	(Red x2)	Double click to change color
Members Idle	(Red x2)	Double click to change color
Call Answered (30)	(Red x2)	Double click to change color
Call Unanswered	(Red x2)	Double click to change color

## Service Level

Service Level

Service Level:

10 seconds

## Alerts

General Alerts Queue Agents Threshold

Alerts

Flash Agent is Not Ready upon alert

300 seconds

Alert me when more than specified number of Agents are Not Ready

10 agents

Alert me when Service Level is below

30.00 percent (30)

In case of alert play system sound beep

In case of alert bring application to front

## Operating Systems: Windows, Mac

The application can be installed on Windows and MAC.

# Modules

Modules are the various tabs containing information in AGMON.

## Queues

The QUEUES module displays a list of all queues that the user (supervisor) has permissions to monitor.



The following list shows the following information in real-time:

- Total calls for the current day
- Calls answered for the current day
- Calls unanswered for the current day
- Calls waiting
- The following items apply for any type of agent (static, dynamic or callback):
  - Agents idle
  - Agents busy
  - Agents paused
  
- Average Wait Time (AWT) for the current day (in seconds)
- Maximum Wait Time (MWT) for the current day (in second)
- Calls Answered (%) for the current day
- Calls Unanswered (%) for the current day
- Service Level (%). This field is calculated as the percent of calls that have been answered within a specified period of time.

This can be configured in the Settings window.

## Wallboard

The Wallboard module displays agent information in real-time. The Wallboard is displayed in a large format intended for use with televisions or other large screens.

MKTG		
Total Calls	Call Forwarded	Call Forwarded
1486	1264	222
Call Forwarded	Call Forwarded	Call Forwarded
22	0	25
Agents/Queue	Average Wait Time	Max Wait Time
4	215.866	807
Call Forwarded (%)	Call Forwarded (%)	Call Forwarded (%)
85.06 %	14.94 %	48.24 %

## General Features

### Full Screen View

Application can be set to full screen view - usually used in environments where a large LCD is used in call center organizations.

Queue		Description	
Call Forwarded	Call Forwarded	Call Forwarded	Call Forwarded
0	0	0	0
Total Calls	Available Calls	Total Calls	Available Calls
234	230	64	28
Agents Logged In	Agents Busy	Agents Logged In	Agents Busy
35	25	1	0
Agents Idle	Agents Not Ready	Agents Idle	Agents Not Ready
1	9	1	0

### Monitor Slide Show

Queue monitoring can be set as a slide show, as well as the slide show interval in seconds.

Calls Waiting		Calls Working	
0	1		
Processed Calls	Total Calls	Received Calls	22
43	177743	175574	
Agents Busy	Agents Logged In	Agents Busy	
2	0	0	
Agents Not Ready	Agents Idle	Agents Not Ready	
1	0	0	

### Queue Monitoring Permissions

Queue monitoring permissions restrict which queue a given user can monitor.

### Total Calls

Displays the number of total of calls received during an ongoing work day.



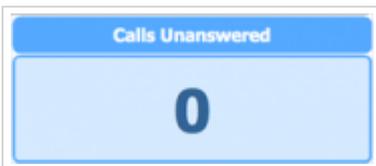
### Calls Answered

Displays the total number of answered calls during an ongoing work day.



### **Calls Unanswered**

Displays the total number of unanswered calls during an ongoing work day.



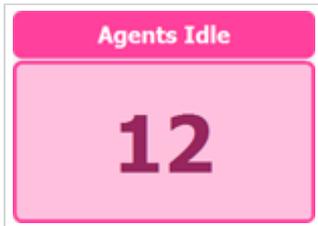
### **Agents Busy**

Displays the total number of agents currently busy.



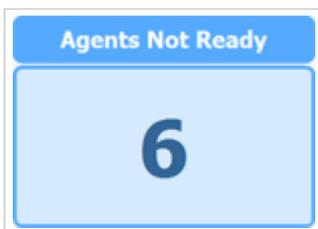
### **Agents Idle**

Displays the total number of agents currently not busy and waiting for an incoming call.



### **Agents Not Ready**

Displays the total number of agents logged in but not currently ready to accept an incoming call.



### **Agents Paused**

Displays the total number of agents unavailable.



### **Average Wait Time**

Displays the average amount of time callers must wait to reach an agent.



### **Max Wait Time**

Displays the maximum amount of time callers must wait to reach an agent.



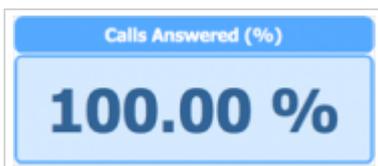
### **Calls Waiting**

Displays the total number of calls waiting in the queue to be answered by the next free agent.



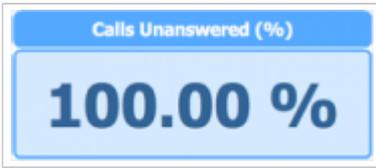
### **Calls answered (%)**

Displays the percentage of answered calls during an ongoing work day.



### **Calls Unanswered (%)**

Displays the percentage of unanswered calls during an ongoing work day.



### **Service Level (%)**

Displays the percentage of service during an ongoing work day.



### **Agents**

The AGENTS module shows details about agents that the user has permissions to monitor and that are currently logged in. All types of agents, including static, dynamic, and callback, are displayed here.

A small screenshot of a table with multiple columns and rows, representing the AGENTS module. The table is mostly illegible due to its small size, but it appears to contain columns for agent details.

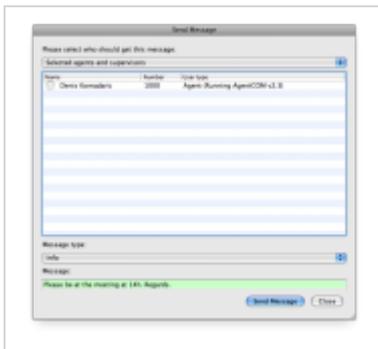
The following information is displayed for each agent:

- Name
- Extension (agent number)
- Status (busy, paused, etc.)
- Time in State
- UID of the Current Call
- Who they are talking to
- Where the call came from (Queue, IVR, direct call, etc.)
- Call Type (inbound or outbound)
- Call Duration
- Caller ID
- Login time (how long the agent has been logged in)

Login type (static, dynamic, or callback)

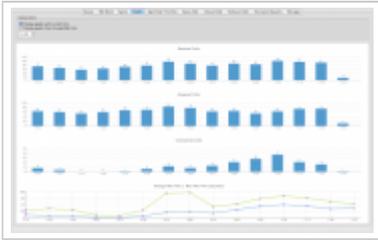
- Assistance Request Icon (appears when a specific agent requests assistance from supervisors)

Supervisors can spy, transfer, and log out agents and their calls if they have permissions to do so. They are also able to send messages to agents (in AgentCOM).



## Graphs

The GRAPHS module shows real-time call statistics in the form of graphs.



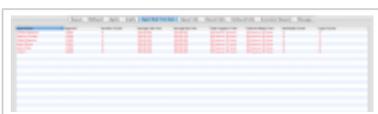
The following information can be displayed:

- Total calls
- Answered calls
- Unanswered calls
- Average wait time and maximum wait time (AWT and MWT)

The user can select a period of time for which to show graphs. By default, the graphs show statistics for the past 4 hours and 15 minutes.

### **Agent Real Time Statistics**

The AGENT REAL TIME STATISTICS module shows current details for each agent.



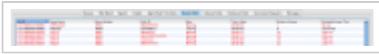
The following information is displayed for each agent:

- Number of times the agent went on pause
- Total talk time
- Average wait time
- Maximum wait time

- Total idle time

## Queue Calls

The QUEUE CALLS module shows all of the incoming calls all queues that the supervisor has permissions to monitor.



For each call, the user can see the following information:

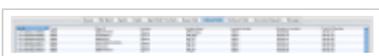
- Unique call ID
- Queue name
- Queue number
- Caller ID
- State of the call (waiting/answered)
- Time in state
- Position in queue
- Estimated answer time (calculated as AWT-current wait time)

The supervisor can perform the following operations for each call if he has the permissions to do so:

- Transfer
- Take call (transfer it to has own extension)
- Spy on call

## Inbound Calls

The INBOUND CALLS module shows all calls coming into the system with relevant information about the call.



For each call, the user can see the following information:

- Unique call ID
- Trunk from which the call came in

- Caller ID
- Location: the current location of the call (IVR, Queue, Conference etc...)
- Location name
- Location number
- Duration in Location (when did the call entered it's current location, i.e. queue, ivr, conference...)
- Total call duration (from when the call came into the system)

The supervisor can perform the following operations for each call if he has the permissions to do so:

- Transfer

## **Outbound Calls**

The OUTBOUND CALLS module shows all calls going out from the system. Users can see who made the call (extension/name/agent) and to what number the call was placed. The supervisor can also see the duration of the call.



The supervisor can perform the following operations for each call if he has the permissions to do so:

- Transfer
- Take call (transfer it to his own extension)
- Spy the call
- Hang up the call

## **Assistance Requests**

The ASSISTANCE REQUESTS module displays requests for assistance from all agents and relevant information about the request..



For each request, the user can see the following information:

- Agent name
- Agent number
- Date/Time of the request
- Agent Notes (this is some informative text that agent enters in AgentCOM when requesting assistance from supervisors, for example:

"Please help me with costumer X in regards to Helix tyres"

- Completed: Yes/No. This will show the status of this request, if it has been completed or not. It is important for a supervisor to know if some other supervisor (using AQMON) has already assisted on a specific request or not , because ALL supervisors see ALL assistance requests from ALL agents.
- Completed By: shows the name of supervisor who completed a specific assistance request.

When a supervisor decides to help an agent, he must inform other supervisors that a specific assistance request has been completed. To do this, right-click and select the option "Mark as completed".

## Messages

The MESSAGES MODULE shows all messages sent between supervisors and agents in the form of information, alerts, or warnings.



AQMON and AgentCOM can communicate with one another by sending short messages. This is not intended to be used as an Instant Messaging service, but rather as a way to quick inform, alert, or warn another user (agent or supervisor) of something.

The communication be done as follows:

- AQMON <-> AQMON
- AgentCOM<-> AgentCOM
- AQMON<-> AgentCOM

The supervisor can see the following information for each message shown in this module:

- From (Agent/Supervisor name/number)
- To (Agent/Supervisor name/number)

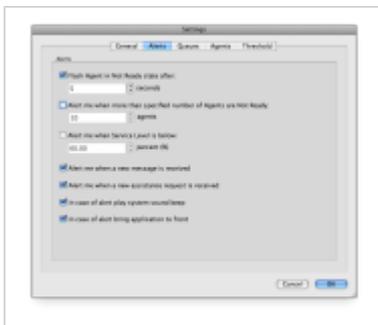
- Date/Time when message was sent
- Message: message content

## Alerts

In current version of AQMON, there is no Alerts module. However, it has been implemented on a customized basis before.



The ALERTS MODULE shows all alerts that the user has selected in the SETTINGS dialog. When a specific alert occurs, AQMON is brought to the front (if specified in the settings dialog) and will select this module automatically so that the supervisor can see the alert.



The supervisor can see the last 50 alerts with the date/time and a detailed description.

For example, possible alerts could be:

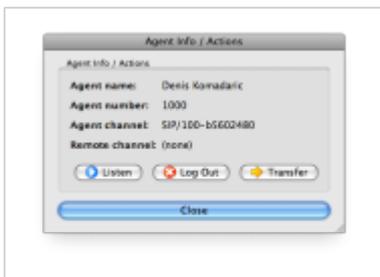
- "More than 10 agents went on pause in the queue: Support" or
- "More than 10 calls are waiting in queue: Marketing" or
- "Service level in queue Sales went below 70%" etc.

## Supervisor

Supervisors are a special kind of user with permissions over other users.



Supervisors can spy, hang up, or transfer calls.



## General Features

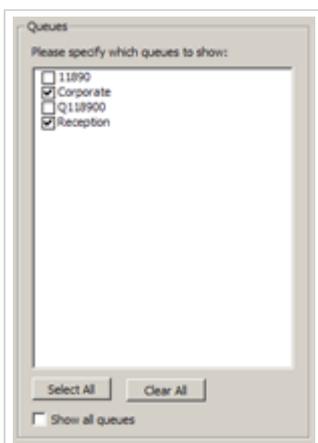
### Manager output

Manager system output is a useful tool for troubleshooting and debugging. This option is designed for administrators.



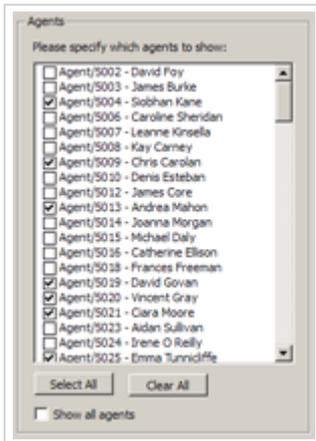
## Show queues

Select all or a particular queue to be shown.



## Show agents

Select all or particular agent(s) to be monitored.

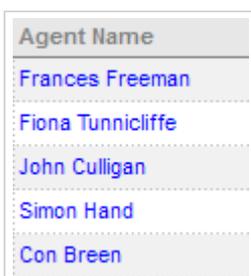


The screenshot shows a dialog box titled "Agents" with the instruction "Please specify which agents to show:". It contains a list of 25 agents, each with a checkbox. The following agents are checked: Agent/5004 - Siobhan Kane, Agent/5009 - Chris Carolan, Agent/5013 - Andrea Mahon, Agent/5019 - David Govan, Agent/5020 - Vincent Gray, Agent/5021 - Clara Moore, and Agent/5025 - Emma Tunnicliffe. At the bottom, there are "Select All" and "Clear All" buttons, and a "Show all agents" checkbox which is currently unchecked.

Agent ID	Agent Name	Selected
Agent/5002	David Poy	<input type="checkbox"/>
Agent/5003	James Burke	<input type="checkbox"/>
Agent/5004	Siobhan Kane	<input checked="" type="checkbox"/>
Agent/5006	Caroline Sheridan	<input type="checkbox"/>
Agent/5007	Leanne Kinsella	<input type="checkbox"/>
Agent/5008	Kay Carney	<input type="checkbox"/>
Agent/5009	Chris Carolan	<input checked="" type="checkbox"/>
Agent/5010	Denis Esteban	<input type="checkbox"/>
Agent/5012	James Core	<input type="checkbox"/>
Agent/5013	Andrea Mahon	<input checked="" type="checkbox"/>
Agent/5014	Joanna Morgan	<input type="checkbox"/>
Agent/5015	Michael Daly	<input type="checkbox"/>
Agent/5016	Catherine Ellison	<input type="checkbox"/>
Agent/5018	Frances Freeman	<input type="checkbox"/>
Agent/5019	David Govan	<input checked="" type="checkbox"/>
Agent/5020	Vincent Gray	<input checked="" type="checkbox"/>
Agent/5021	Clara Moore	<input checked="" type="checkbox"/>
Agent/5022	Aiden Sullivan	<input type="checkbox"/>
Agent/5024	Drene O'Reilly	<input type="checkbox"/>
Agent/5025	Emma Tunnicliffe	<input checked="" type="checkbox"/>

## Agents name

Show agent name.



The screenshot shows a table with a header "Agent Name" and five rows of agent names: Frances Freeman, Fiona Tunnicliffe, John Culligan, Simon Hand, and Con Breen. The names are displayed in blue text on a light gray background.

Agent Name
Frances Freeman
Fiona Tunnicliffe
John Culligan
Simon Hand
Con Breen

## Extension number

Shows agents' extension number.

Extension
Agent: 5018
Agent: 5035
Agent: 5039
Agent: 5051
Agent: 5066

## State

Shows agents' current status, e.g. "Not Ready", "Idle", or "Talking".

State
Not Ready
Idle
Idle
Talking
Talking

## Caller ID

Shows caller ID, number dialling the queue.

CallerID (Queue)
---
---
0429662772 (11890)
0879319596 (11890)
0879064372 (11890)

## Time in state

Shows agents' time in current call.

Time in State
0:10:40
0:00:56
0:00:02
0:00:06
0:00:11

### Waiting caller

Shows the total number of callers waiting in a particular queue.

Waiting
0
0
0
0
0

### Agents logged in

Shows the total number of agents currently logged into a particular queue.

Agents Logged In
0
20
20
0
0

### **Agents on a call**

Shows the total number of agents currently on a call.

Agents On Call
0
6
6
0
0

### **Agents idle**

Shows the total number of agents currently idle.

Agents Idle
0
12
12
0
0

### Agents not logged

Shows the total number of agents not logged into a particular queue compared to the total number of agents assigned to that queue.

Agents Not Logged
0
100
90
4
1

### Agents not ready

Shows the total number of agents not ready to receive an incoming call.

Agents Not Ready
0
2
2
0
0

### Threshold

Item	Administrator	Color
First		
Call Waiting	(Red) (off)	Double click to change color
Call Unanswered (30)	(Red) (off)	Double click to change color
Max Wait Time	(Red) (off)	Double click to change color
Members Pending	(Red) (off)	Double click to change color
AMR	(Red) (off)	Double click to change color
Members Busy	(Red) (off)	Double click to change color
Service Level (30)	(Red) (off)	Double click to change color
Call Offered	(Red) (off)	Double click to change color
Call Answered	(Red) (off)	Double click to change color
Members Idle	(Red) (off)	Double click to change color
Call Answered (30)	(Red) (off)	Double click to change color
Call Unanswered	(Red) (off)	Double click to change color

## Service Level

Service Level

Service Level:

10 seconds

## Alerts

General Alerts Queues Agents Threshold

Alerts

Flash Agent in Not Ready state after  
 seconds

Alert me when more than specified number of Agents are Not Ready  
 agents

Alert me when Service Level is below  
 percent (30)

In case of alert play system sound beep

In case of alert bring application to front

# Troubleshooting

- Users can sometimes receive this message when trying to Log into AQMON: "Enhanced Service is not enabled for this account. Please contact your administrator."

The above means that the extension which is used to Log into AQMON, does not have Enhanced Service "Monitor Queues" enabled, and it is a required option for user to be able to use AQMON.

- "Tools->Manager Output" menu can be used to track events from Asterisk. It is sometimes useful for the developer to fix some issues in AQMON.

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