
Mitel MiContact Center Enterprise

DIMENSIONING CALCULATOR

INTELLIGENT INTERACTION FOR EXCELLENT CUSTOMER CARE

Release 9.3



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Dimensioning Calculator
Intelligent Interaction for Excellent Customer Care
Release 9.3 – February 2018

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CALL TRAFFIC

The Call Traffic tab is used to calculate the number of trunks, media channels and IVR licenses necessary for a configuration. This can be used to estimate a configuration.

Call Traffic
Service Group Agents
SeC Traffic

Input

Probability of Blocking
Incoming Call Trunk: 5.00 % Media Trunk: 5.00 %

Service

Service: Service 1

Calls per Hour (Peak): 3000 Select Message Duration (Seconds): 10
Average Total Call Length (Seconds): 180 Input Message Duration (Seconds): 10
Average IVR Handling Time (Seconds): 60 Initial Queue Message Duration (Seconds): 10
Average Queue Time (Seconds): 120 Repeat Queue Message Duration (Seconds): 5
Welcome Message Duration (Seconds): 10 Repeat Queue Message Interval (Seconds): 30

Results

Service Results (Erlangs/Trunks Required):

Service	I/C Calls	IVR	Welcome	Selection	Input	Init Queue	Rep Queue

Totals

Incoming Call Traffic (Erlangs/Trunks Required): ---
Media Traffic (Erlangs/Trunks Required): ---
Estimated Concurrent IVR Sessions: ---

Calculate Defaults... Open... Save... Close

INPUT

PROBABILITY OF BLOCKING:

Incoming Call Trunk	Percentage of blocked incoming calls Specify the acceptable percentage of incoming calls that will receive a busy signal.
Media Trunk	Percentage of blocked media channels Specify the acceptable percentage of blocked media channels, i.e. calls that will not be able to reserve a media channel.

SERVICE:

Service:	Select which service you are going to calculate. You can have up to 8 services which are totaled under Results.
Calls per hour (peak)	Maximum number of calls per hour Specify the estimated maximum number of calls per hour for the configuration.
Average Total Call Length (Seconds)	Specify the estimated average call length in seconds for the configuration. This is the time in seconds that the call stays with the agent.
Average IVR Handling Time (Seconds)	Specify the estimated average IVR handling time in seconds for the configuration. Please note that this value will be used when calculating the necessary number of media channels in the Results section below.
Average Queue Time (Seconds)	Specify the estimated average queue time in seconds for the configuration.
Welcome Message Duration (Seconds)	Specify the estimated welcome message duration time in seconds for the configuration.
Select Message Duration (Seconds)	Message duration time in the automatic attendant menu Specify the estimated message duration time in seconds in the automatic attendant menu.
Input Message Duration (Seconds)	If caller's input (for example, invoice number, account number, and so on) is needed, specify the estimated input message time in seconds for the configuration.
Initial Queue Message Duration (Seconds)	Specify the estimated duration time in seconds for the first message played to queuing callers.
Repeat Queue Message Duration (Seconds)	Specify the estimated duration time in seconds for repeated messages played to queuing callers after the first queue message.
Repeat Queue Message Interval (Seconds)	Specify the time in seconds between repeated queue messages.

Enter your variables to the best of your knowledge and press Calculate. If you are not satisfied with the results, modify your input values and press Calculate again.

To continue with a new service in the same installation, select a new Service from the Service drop-down list and enter new variables (the old ones are stored), and when you press Calculate the new calculations will be shown in addition to the previous.

Totals show the totals of all services calculated.

RESULTS

SERVICE RESULTS (ERLANGS/TRUNKS REQUIRED)

Service	Name of the service as selected previously.
I/C Calls (Erlang/number of Trunk lines)	This is the calculated traffic Erlangs and the number of Trunk lines required to for incoming calls to handle traffic at the blocking rate specified.
IVR (Erlang/number of Trunk lines)	This is the calculated traffic Erlangs and the number of media channels required to handle the IVR traffic. This is used for calculating the number of IVR channels necessary.
Welcome	This is the calculated traffic Erlangs and media channels for playing the welcome messages. This is used for calculating the number of media channels necessary.
Selection	This is the calculated traffic Erlangs and media channels for playing menu messages. This is used for calculating the number of media channels necessary.
Input	This is the calculated traffic Erlangs and media channels for requesting input from the caller. This is used for calculating the number of media channels necessary.
Init Queue	This is the calculated traffic Erlangs and media channels for playing initial queue messages. This is used for calculating the number of media channels necessary.
Rep Queue	This is the calculated traffic Erlangs and media channels for playing repeated queue messages. This is used for calculating the number of media channels necessary.

TOTALS

Incoming Call Traffic /Erlang/Trunks Required)	This is a total of all the configured services' incoming calls by traffic Erlangs and Trunks required. The Trunks value can be used to estimate the number of external trunks necessary to support the amount of traffic indicated.
Media Traffic (Erlang/Trunks Required)	This is the calculated total required capacity in traffic Erlangs and Trunks required for media traffic, based on the input values specified on this page. This value can be used to indicate the number of media ports required in OAS as well as connections between OAS and MX-ONE.
Estimated Concurrent IVR Sessions:	This is the calculated necessary capacity for the number of concurrent Script Manager (IVR) sessions. The calculation is based on the values specified in the Calls per hour, Average IVR handling time fields and the entered acceptable blocking probability.

SERVICE GROUP AGENTS

The Service Group Agents can be used in situations where you know the number of calls and service data to calculate how many agents would be necessary and their utilization.

This can be used in consultative situations or to verify that a configuration in terms of number of agents and incoming calls is realistic.

Call Traffic	Service Group Agents	SeC Traffic
Input		
Calls per Hour (Peak):	3000	
Service Level %:	90	
Maximum Queue Time (Seconds):	180	
Average Handling Time (Seconds):	240	
Clerical Time (Seconds):	10	
Number of Recorded Calls per Hour:	0	
Results		
Agents Required:	----	
Agent Utilization:	----	
Traffic for Recorded Calls (MB/hour):	----	
Buttons		
Calculate	Defaults...	Open...
Save...	Close	

INPUT

INPUT:

Calls per Hour (Peak)	Maximum number of calls per hour Specify the estimated maximum number of calls per hour for the configuration.
Service Level %	This is the desired service level as a percentage of Maximum Queue Time (see next item). It represents the percentage of calls that should be answered before they wait in queue for the Maximum Queue Time configured.
Maximum Queue Time (Seconds)	The maximum time the customer is allowed to stay in queue.
Average Handling Time (Seconds)	The average time the call stays with the agent.
Clerical Time (Seconds)	Wrap-up time after handling a call before a new call is allocated to that agent.
Number of Recorded Calls per Hour	The number of service group calls expected to be recorded per hour by all agents.

RESULTS:

Agents Required	Calculated number of agents to handle the call inflow specified based on the service level and average handling time configured.
Agent Utilization	Percentage utilization of agents.
Traffic for Recorded Calls (MB/hour)	Indicates the amount of network traffic that will be generated by transferring recorded calls to the MiCC Enterprise server.

SEC TRAFFIC

SeC Traffic is used to calculate data traffic for a contact center based on how much real time information and data is sent on the LAN/WAN.

The screenshot shows a software window titled "SeC Traffic" with three tabs: "Call Traffic", "Service Group Agents", and "SeC Traffic". The "SeC Traffic" tab is active. The interface is divided into several sections:

- Input:** Contains two columns of input fields.
 - Left column: "Calls per Hour:" (3000), "Service Accesses:" (5), "Service Groups:" (20), "Performance Interval:" (5).
 - Right column: "Agents:" (50), "Average Service Groups per Agent:" (10), "Number of Information Managers:" (10), "Information Manager Update Interval:" (2).
- Real Time Interface Traffic:** A sub-section containing:
 - "Server Type" with radio buttons for "Master" (selected) and "Slave".
 - "Slave Sites:" (1), "Service Groups:" (20), and "Update Interval:" (5).
- Results:** Divided into two panels.
 - Traffic (KBits/Sec):** Three output fields: "Information Manager Traffic:", "Solidus Agent Traffic:", and "RTI Traffic to Master/Slave Sites:", each followed by a dashed line indicating a calculation result.
 - Initial Event Service Data (Bytes):** A table with columns "Agents", "Information Manager", and "Solidus Agent". Below the columns is a large empty rectangular box for data entry.

At the bottom of the window are five buttons: "Calculate", "Defaults...", "Open...", "Save...", and "Close".

INPUT

INPUT:

Calls per Hour	Maximum number of calls per hour Specify the estimated maximum number of calls per hour for the configuration.
Service Accesses	Number of service accesses in the configuration
Service Group	Number of service groups in the configuration
Performance Interval	Specify the configuration's performance interval (based on minutes) for calculating service levels.
Agents	Number of agents using MiContact Center Agent
Average Service Groups per Agent	Average number of service groups each agent is servicing.
Number of Information Managers	Number of Information Manager clients
Information Manager Update Interval	The interval that Information Manager receives updates in seconds.

REAL TIME INTERFACE TRAFFIC:

Server Type	Master indicates that this server is the main server in a networked call center. If Master is selected, a number of slave servers can be entered. Slave indicates that the server is a secondary server in a networked call center.
Slave Sites	Number of slave sites that connect to the master server
Service Groups	Number of service groups that the Real Time Interface consolidates in the networked call center.
Update Interval	The interval (in seconds) that the Real Time Interface updates its clients and/or master server.

RESULTS: TRAFFIC (KBITS/SEC)

Information Manager Traffic	Shows how much data is generated on the LAN for Information Manager clients
MiContact Center Agent Traffic	Shows how much data is generated on the LAN for MiContact Center Agent clients
RTI Traffic to Master/Slave Sites	Shows how much data is generated on the LAN/WAN between master and slave Real Time Interface servers

RESULTS: INITIAL EVENT SERVICE DATA (BYTES)

Agents	Number of agents
Information Manager	The amount of data that must be sent with the initial configuration data at startup for the Information Manager clients
MiContact Center Agent	The amount of data that must be sent with the initial configuration data at startup for the MiContact Center Agent clients
