

## **GENESYS**

This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

### Performance Management Advisors Hardware Sizing Guide

General Guidelines for Contact Center Sizing

#### Contents

- 1 General Guidelines for Contact Center Sizing
  - 1.1 Example Configurations for Contact Centers based on Size
  - 1.2 Memory Allocation Recommendations

# General Guidelines for Contact Center Sizing

The following table shows the contact center sizing categories based on the number of base objects being monitored and the daily call volume.

#### **Contact Center Sizing Categories**

Sizing Category	Number of Agents	Number of Agent Groups	Number of Queues	Daily Call Volume
Small	Fewer than 500	Fewer than 50	Fewer than 50	Of the order of tens of thousands
Medium	Fewer than 5000	Fewer than 400	Fewer than 1000	Up to 500,000
Large	Fewer than 30,000	Fewer than 1000	Fewer than 8000	Up to 4 million

#### Example Configurations for Contact Centers based on Size

The following are examples of possible configurations based on contact center size. You can use these examples as general guidelines when deploying the full Advisors suite, particularly for Advisors releases prior to 8.1.5. The examples are based on servers running Windows operating systems, but – starting with Advisors release 8.5.0 – you can deploy Advisors components on Red Hat Enterprise Linux 5. See the Pulse Advisors page in the Genesys Supported Operating Environment Reference Guide for a list of supported operating systems.

See also "Capacity, Measurement, and Sample Architecture" in this guide, which provides performance information from tested environments running Advisors release 8.1.5 software. The "Capacity, Measurement, and Sample Architecture" section discusses each Advisors component separately (Contact Center Advisor (CCAdv), Workforce Advisor (WA), and Frontline Advisor (FA)) and provides specific deployment architectures for each to successfully achieve 1500 concurrent dashboard users.

In the configurations listed below, Frontline Advisor and Agent Advisor (FAAA) running on a Cisco platform using the Advisors Cisco Adapter (ACA) has not been shown. If you have a Cisco environment and wish to use FAAA, a separate instance of FAAA needs to be installed along with an instance of the ACA. Hence, the hardware requirements shown in this section for FA and the Advisors Genesys Adapter (AGA) for FA will need to be duplicated.

#### **Important**

Agent Advisor and the Contact Center Advisor–Mobile Edition applications are mentioned in the tables on this page. Be aware that both are discontinued starting with Advisors release 8.5.2.

#### Small Contact Center Size

The following table shows an example of the architecture for a small-sized Contact Center. In this architecture, there is no separate server for the Web tier. Apache is deployed on one of the servers hosting the applications.

#### **Small Contact Center**

Server Number	Application Component(s)	Processor(s)	Memory	Hard Drive Space
1	Advisors Platform, Contact Center Advisor XML Generator, and Advisors Web services (including Resource Management Console)	Quad-core 2.0 GHz+	4 GB	10 GB
2	Contact Center Advisor-Mobile Edition	Dual-core 2.0 GHz+	4 GB	5 GB
3	Apache, Advisors Platform, Frontline Advisor, and Advisors Genesys Adapter	Quad-core 2.0 GHz+	4 GB	10 GB
4	Databases	Dual Quad-core 2.0 GHz+	4 GB+	30 GB
5	Supervisor Desktop Service (for Resource Management Console)	Quad-core 2.0 GHz+	4 GB+	10 GB

#### Medium Contact Center Size

The following table shows an example of the architecture for a medium-sized Contact Center. In this architecture, you separate the major application, database, and Apache installations.

#### **Medium Contact Center**

Server Number	Application Component(s)	Processor(s)	Memory	Hard Drive Space
1	Apache Web Server	Dual-core 1.86 GHz+	512+ MB	5 GB
2	Advisors Platform and Advisors Web services (including Resource Management	Dual Quad-core 2.0 GHz+	4 GB	10 GB

Server Number	Application Component(s)	Processor(s)	Memory	Hard Drive Space
	Console)			
3	Advisors Platform and Workforce Advisor	Dual Quad-core 2.0 GHz+	4 GB	10 GB
4	Contact Center Advisor XML Generator	Dual Quad-core 2.0 GHz+	4 GB	10 GB
5	Contact Center Advisor–Mobile Edition	Dual-core 2.0 GHz+	2 GB	5 GB
6	Advisors Genesys Adapter (for Contact Center Advisor) and Advisors Genesys Adapter (for Frontline Advisor)	Dual Quad-core 2.0 GHz+	4 GB	10 GB
7	Advisors Platform and Frontline Advisor	Dual Quad-core 2.0 GHz+	4 GB	10 GB
8	Databases	Dual Quad-core 2.0 GHz+	4 GB+	50 GB
9	Supervisor Desktop Service (for Resource Management Console)	Quad-core 2.0 GHz+	6 GB+	10 GB

#### Large Contact Center Size

The following table shows an example of the architecture for a large-sized Contact Center.

#### **Large Contact Center**

Server Number	Application Component(s)	Processor(s)	Memory	Hard Drive Space
1	Apache Web Server	Dual-core 1.86 GHz+	8 GB	5 GB
2	Advisors Platform and Advisors Web services (including Resource Management Console)	Dual Quad-core 2.83 GHz+	16 GB	20 GB
3	Advisors Platform and Workforce Advisor	Dual Quad-core 2.83 GHz+	16 GB	20 GB
4	Contact Center	Dual Quad-core	16 GB	20 GB

Server Number	Application Component(s)	Processor(s)	Memory	Hard Drive Space
	Advisor XML Generator	2.83 GHz+		
5	Contact Center Advisor-Mobile Edition	Dual-core 2.0 GHz+	4 GB	5 GB
6	Advisors Genesys Adapter (for Contact Center Advisor)	Dual Quad-core 2.83 GHz+	16 GB	20 GB
7	Advisors Genesys Adapter (for Frontline Advisor)	Dual Quad-core 2.83 GHz+	16 GB	20 GB
8	Advisors Platform and Frontline Advisor	Dual Quad-core 2.83 GHz+	16 GB	10 GB
9	Databases	Dual Quad-core 3.0 GHz+	32 GB	80 GB
10	Supervisor Desktop Service (for Resource Management Console)	Quad-core 3.0 GHz+	8 GB+	10 GB

#### Memory Allocation Recommendations

When an Advisors server records out-of-memory errors in its log file, consider changing the memory allocation for the server. Monitor the errors and, if the problem with memory persists, experiment with higher values. After you change the memory allocation, continue to monitor the server and the log file to ensure that you have configured acceptable values. For example, the Advisors server might fail to start if you set the memory allocation too high because the memory requested from the operating system is simply not available. The server will report an error in the log file if it cannot start because the requested memory is unavailable.

Genesys recommends the following values as the *maximum* memory setting values for the CATALINA\_OPTS and JAVA\_OPTS variables:

Small Contact Center: 4 000
Medium Contact Center: 8 000
Large Contact Center: 12 000

For additional information, see Change Memory Allocation in the *Genesys Pulse Advisors Deployment Guide*.