

# Demographics

## Maintenance and Support Repository



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## Introduction

This document summarises key characteristics of applications in the ISBSG Maintenance & Support Repository (M&S) 2025 release 12.

The ISBSG M&S Repository contains data for 2417 applications. However, the application totals shown at the bottom of the tables, in this report, rarely equal 2417. This is because submitters do not necessarily provide application data for all the data fields that ISBSG offers.

By studying the demographics that follow, you will be able to establish the areas that are of specific interest to you. This is what makes the ISBSG Repository unique. A broad range of application types from many industries and many business areas are available for you to use for estimating, investigating trends, comparing platforms and languages or benchmarking.

For more information about ISBSG, refer to Appendix A.

## Benchmark Year

The Benchmark Year is the main year during which information (e.g. number of defects) is recorded for an M&S application.

Number of Applications per Year	
Number of Applications	Benchmark Year
169	1993
45	2000
3	2001
12	2002
29	2003
30	2004
35	2005
26	2006
12	2007
34	2008
110	2009
29	2010
9	2011
464	2012
111	2018
170	2019
248	2020
248	2021
248	2022
248	2023
137	2024
<b>2417</b>	

**Table 1: Applications per Benchmark Year**

## Benchmark Period

The Benchmark Period represents the number of months that data was collected for an application by an IT or metrics organisation. This is prior to its submission to ISBSG.

ISBSG uses a 12-month period as a basis for the comparison of application metrics. Since the actual benchmark period of submitted data varies, a scaling factor is applied. If an application’s benchmark period is 12 months, the scaling factor will equal “1”; if the benchmark period is 6 months, the scaling factor will equal “2” etc. This scaling factor will then multiply data such as defect counts and effort values so that data comparisons are based on a 12-month period.

The table below summarises benchmarking periods and the number of applications in each.

Number of Applications per Benchmark Period	
Benchmark Period	Number of Applications
Less than one month	4
1 month to less than 4 months	483
4 months to less than 8 months	51
8 months to less than 12 months	45
12 months	1754
More than 12 months to less than 16 months	38
16 months or more	28

**Table 2: Applications per Benchmark Period**

## Application origin

Applications have been submitted to ISBSG from different countries, as displayed in the table below.

Number of Applications Submitted per Country	
Country of Submission	Number of Applications
Argentina	1
Australia	123
Brazil	59
Denmark	2
Finland	192
France	1
India	97
Italy	26
Netherlands	1429
Sweden	1
United Kingdom	457
United States of America	29

**Table 3: Application’s Country of Origin**

## Industry

Applications in the M&S Repository originate from a variety of industries, as shown in the table below.

Number of Applications Submitted per Industry Type	
Industry Type	Number of Applications
Banking	179
Communications/Telecommunications	186
Education	79
Electronics and Computers	48
Financial	539
Government	388
Insurance	9
Logistics	140
Manufacturing	24
Media	48
Medical	79
Other	181
Service Industry	11
Utilities	282
Wholesale and Retail	195

**Table 4: Application's Industry Types**

## Application Types

The application types found in the in the M&S Repository are displayed in the table below.

Application Types	
Description	Number of Applications
Business	691
Catalogue/register of things/events	13
Collects data from other applications	29
Command/control	6
Communications	8
Core business application	54
Customer billing	72
Customer relationship management	134
Data collection	29
Data warehouse	30
Database system	54
Decision support system	25
Diagnostics	6
Document management	69
Electronic data interchange	48
ERP	175
Financial	69
Human resource management	11
Job, case, incident project management	9
Logistic or supply/planning and control	12
Management/performance reporting	8
Mathematics/statistics/engineering	4
Network & systems	21
Online analysis & reporting	10
Policy management	12
Stock control & order processing	76
Telecommunications	23
User Interface	7
Web applications	162
Workflow supply & management	59

**Table 5: Application Types**

## Application Sizing Methods

Application sizes are measured using functional sizing methods or by counting thousands of lines of code (KSLOC).

The following chart summarises the methods used to measure application sizes. The value next to each sizing method represents the number of applications sized by this method. In some cases, applications were sized using a function point method (i.e. FISMA, IFPUG or NESMA) as well KSLOC.

Application Sizing Methods	
Description	Number of Applications
FISMA	192
IFPUG	144
NESMA	1426
KSLOC	348

**Table 6: Application Sizing Methods**

## Programming Languages

1842 applications have programming language information. Chart 1 displays the percentage of applications with one, two, three, four or five or more programming languages.

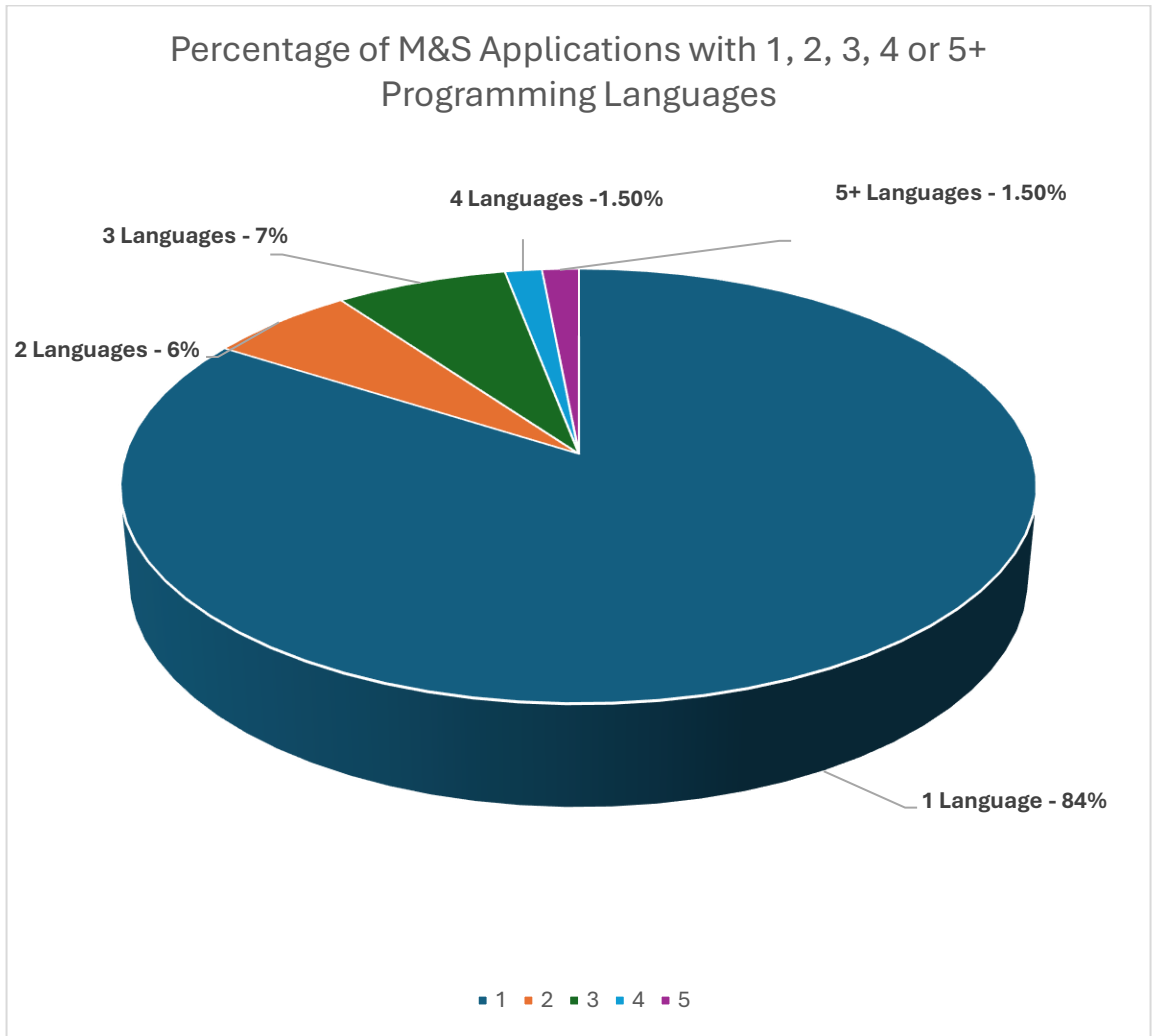


Chart 1: Percentage of Applications and Their Numbers of Programming Languages

## Programming Language Type

There are many programming languages recorded in the repository. This can make it difficult to compare some applications. Consequently, languages are classified by type.

2247 Programming Languages in the M&S Repository, could be classified according to their language type – Application Generator, 2GL, 3GL or 4GL.

The most popular Application Generator is Telon.

The most popular 3GLs are Cobol and Java.

The most popular 4GLs are .Net and Oracle,

Chart 2 displays the percentage breakdown of programming language types in the M&S Repository.

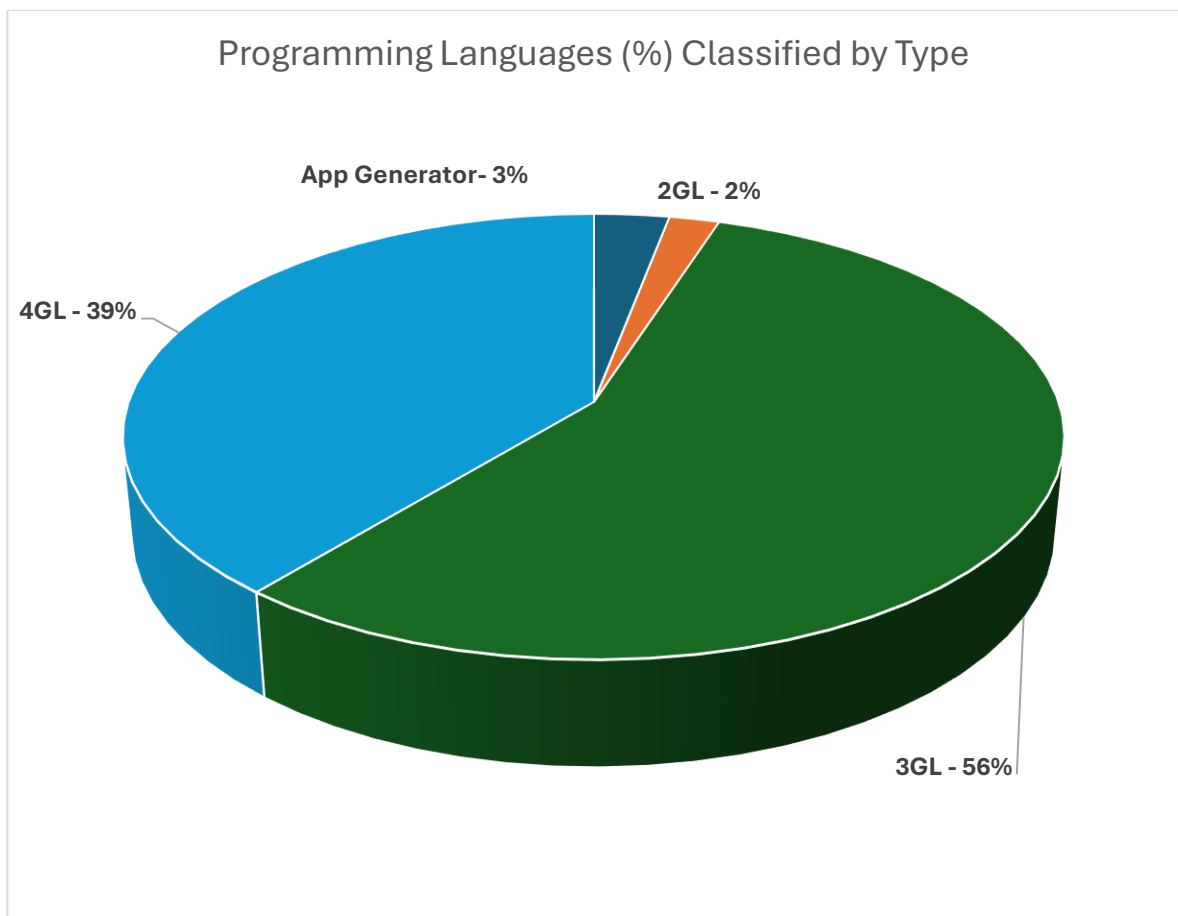
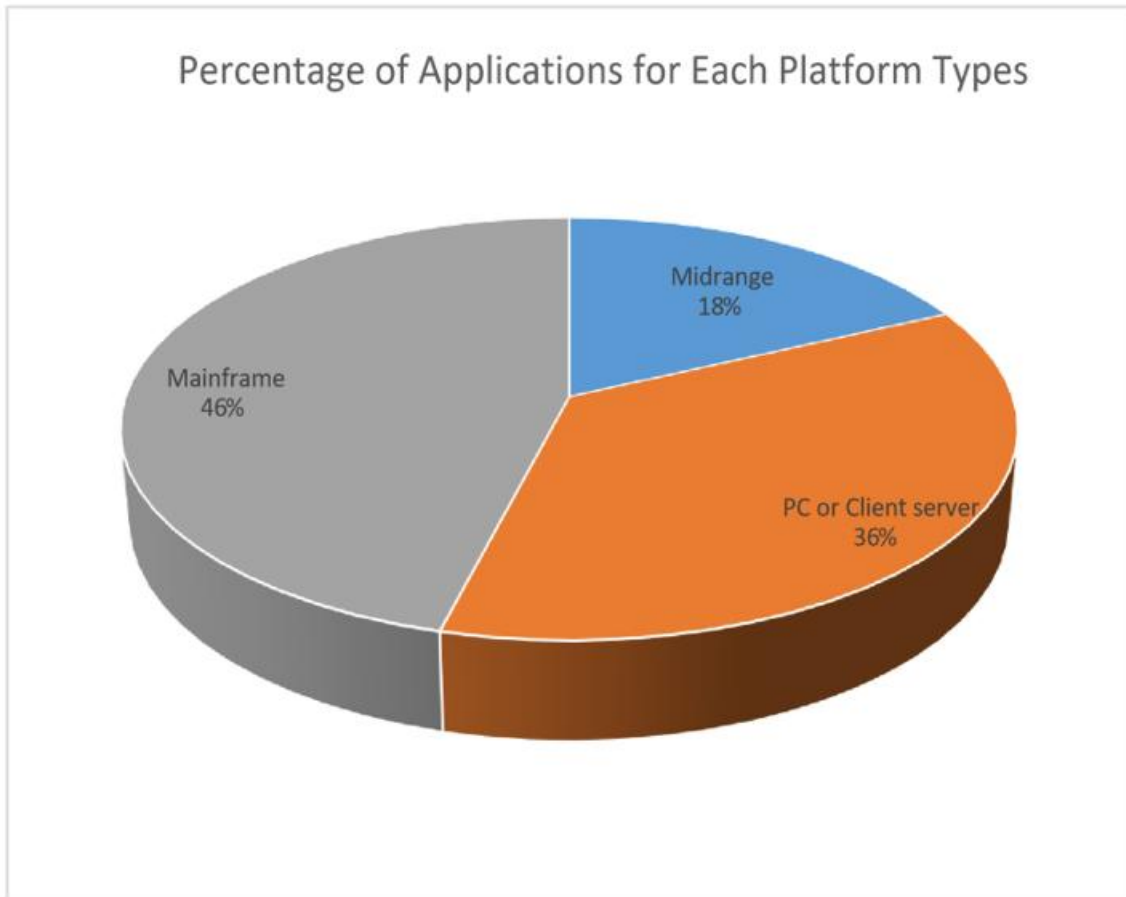


Chart 2: Percentage of Applications Classified by Language Type

### Primary Platform Type

Primary platforms are mainly classified as Mainframe, Midrange, PC or Client/Server. 214 M&S applications had their primary platform specified as one of these. The percentage breakdown of this classification is shown below.



**Chart 3: Percentage of Applications Classified by Primary Platform Type**

## Appendix A - ISBSG

The ISBSG is a not-for-profit organization founded in 1997 by a group of national software metrics associations. Their aim was to promote the use of IT industry data to improve software processes and products.

ISBSG is an independent international organization that collects and provides industry data of software development applications and maintenance & support activities. Their aim is to help all organizations (commercial and government, suppliers and customers) in the software industry to understand and to improve their performance.

ISBSG sets the standards of software data collection, software data analysis and software application benchmarking processes. It is the international thought leader in these practices.

The ISBSG mission is to help YOU and your organization improve the estimation, planning, control and management of your IT software applications and/or maintenance and support contracts.

To achieve this: ISBSG maintains and grows 2 repositories of IT software development/maintenance & support data. This data originates from trusted, international IT organizations and can be obtained for modest fee from the website <https://www.isbsg.org/data-subscription-2/>

### Help us to collect data

ISBSG is always looking for new data. In return for your data submission, you receive a free benchmark report that shows the performance in your application or contract against relevant industry peers.

Please submit your data through one of the forms listed on <http://isbsg.org/submit-data/>

### Partners

This page will help you to find an ISBSG partner in your country <http://isbsg.org/board/>