IBM @server Solutions

IBM and i2
Sizing and Planning Questionnaire

Americas, Europe, Middle East, Africa, and Asia Pacific:

Send completed questionnaire to either your local IBM contact or:

IBM Americas Techline Solutions Sizing	
by E-mail	eSizings@us.ibm.com
or Fax	+1 845-491-2372

1.0 INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

Before completing the questionnaire, read the *Important Notes* on the next several pages. Then follow the steps below.

1. Read all of the Important Notes.
2. Complete the general sizing questions, providing special notes or comments about your i2 project.
3. Return the questionnaire to IBM.

2.0 IMPORTANT NOTES

2.1 Purpose of the Questionnaire

The purpose of this questionnaire is to collect information that will be used to estimate the IBM hardware resources required to run the basic i2 application suite on, RS/6000/pSeries, Netfinity/xSeries or mixed environments. The sizing estimate results will include recommendations for CPU(s), memory, and disk. In addition, information from the sizing questionnaire may be used by an IBM sales representative or business partner to develop an IBM hardware configuration to support the proposed i2 installation.

2.2 What is a Sizing Estimate?

A sizing estimate is an approximation of the hardware resources required to support an i2 implementation. It is a pre-sales effort based on information available at a point in time, providing an entry into understanding the customer's hardware requirements. Customers' actual experiences will vary from the sizing estimate for many reasons, including batch and reporting workloads, and custom code. The degree of variability can range from small to very significant.

Most likely, there will be software, server, and network requirements that are not addressed by this sizing estimate. For example, many i2 installations run software for systems management, EDI translation, file transfer, help desk management, etc. To determine the complete hardware and software configuration required for your i2 implementation, we recommend that you work with an i2 specialist who will help you to develop the overall system architecture.

Sizing the hardware requirements for each customer's i2 implementation is an *iterative process*, which may be refined and repeated a number of times. If you are in the early stages of planning, you will probably have limited information about your planned i2 environment. In this case, we can complete the sizing estimate with general information about the numbers of users your IBM / i2 system needs to support. When you are further along in your i2 implementation planning, you will know more about i2, the i2 applications you plan to use, and your potential i2 transaction activity. At that time, you may request another sizing estimate based on more detailed information. In any case, after receiving the results of a sizing estimate, you may choose to revise your input and request a re-sizing.

It is important to understand that the sizing estimate is a pre-sales effort mainly based on benchmark performance data; it should not replace capacity planning for installed systems. You can use the sizing estimate for pre-installation planning; however, once you are in the process of implementing i2, you should work with an IBM/i2 Capacity Planning consultant to monitor and predict the ongoing resource requirements e.g. for your production i2 system.

The IBM/i2 sizing methodology is continually reviewed and revised to provide the best possible estimate of the IBM hardware resources required to run i2. Guidelines for sizing i2 come from a number of sources, including i2, i2 benchmarks, and customer feedback. Based on information from these sources and your completed sizing questionnaire, we will analyze your i2 requirements and recommend an IBM hardware configuration.

Customer results may vary, and IBM assumes no liability for actual results that differ from the sizing estimate.

2.3 How to Obtain Assistance and IBM Contacts

The questionnaire was designed so that you can answer it without detailed knowledge of i2. IBM has established the Techlines Solutions Sizing team to provide assistance to your queries and help to size and configure your i2 Solution . These have been established on geographical basis to address them locally. To make sure that you are using the latest version of this questionnaire, or if you have any questions about it and also once you have filled in the questionaires please contact:

For North and South Americas, EMEA, and AP: IBM Americas Techline Solutions Sizing

- ▪ To obtain a softcopy of the questionnaire, visit http://www.ibm.com/erp/sizing or ask your IBM Representative or send a request to the IBM Sizing Center at eSizings@us.ibm.com
- ▪ For questions, you can reach the IBM Sizing Center at 800-IBM-0222 or at 888-IBM-5525 option 6.

For additional information on IBM and i2, go to

External : http://www.ibm-i2.com

Internal : http://w3.ncs.ibm.com/solution.nsf/SCM/PLUG-4WK2ER?OpenDocument

2.4 IBM/i2 Sizing Methodology and Terminology

Sizing Methodology

The objective of the IBM/i2 sizing methodology is to estimate the hardware resources required to support your *peak hour of business processing*. Our sizing philosophy is that if we size the hardware to provide acceptable response time for the peak application workload, then all workloads outside of the peak hour should also provide acceptable response time.

Your first step in the sizing process is to identify your organization's peak hour of processing. Next, you will complete the sizing questionnaire, providing information about your planned i2 online and batch processing for the peak hour. In the Sizing Center, we will use the IBM/i2 sizing tools to convert your questionnaire responses into potential i2 workload and estimate the hardware resources required to support the system.

Note: For quantity structure-based sizings, some customers cannot identify specific application volumes for the peak hour. In those cases, we will accept average yearly volumes.

Identifying the Peak Hour of Processing

Before you can specify your online and batch transaction volumes, you must identify your peak hour of processing. The peak hour is the busiest hour of activity from an information-processing standpoint. It is the hour in which the CPU utilization is the highest. In identifying your peak hour, consider how your processing volumes vary throughout the year and select a peak hour during the busiest time of the year. If you do not know the peak hour, you may need to survey the user departments of the various i2 modules. Typically, the peak hour occurs somewhere between 8:00 a.m. and 6:00 p.m., but this can vary

Identifying the Online Processing Volumes

Once you have identified the peak hour, you must identify the i2 functions that will be in use during that hour. For a user-based sizing, you will identify the i2 modules that will be active during the peak hour and the numbers of users of each module. For a quantity structure-based sizing, you will breakdown the modules by transaction and specify the number of transactions to be processed during the peak hour.

Note: It is important to understand that you should not include every i2 module/transaction to be used by your organization. Instead, you should report only those i2 modules/transactions that will be active during the peak hour.

Identifying the Batch Processing Workload

The next step is to identify the batch processing workload. For a user-based sizing there is headroom being taken into consideration. For a quantity structure-based sizing, you will identify the batch quantity structure volumes for the peak hour. Also please provide a timeline of when your available window for batch processing occurs.

Note: In most organizations, the peak hour occurs during the day and includes both online and batch processing. However, for some organizations, overnight batch processing actually requires more CPU resources than the daytime workload (i.e., the peak hour occurs at night with little or no online activity). If this is the case for your organization, you must request a quantity structure-based sizing and provide application volumes for the batch jobs that will run during the peak hour. We will size your system to accommodate this batch workload.

Identifying the Planning Horizon and Time Periods

For each planning function (Forecasting, Supply Chain Planning, Replenishment, Fulfillment, etc.) please indicate both the frequency you run a new plan and the time period (bucket) for which you plan for. Frequency for example may be monthly, weekly, daily, or multiple times daily. For time periods, please state how far back you use historical data if applicable, and how far into the future you forecast. Also please state whether your time periods are stated in Days, Weeks, Months, Years.

Planning Function	Frequency	Historical Periods Used	Planning Horizon

SKU Volumes, DC's, Shipping Lanes, Geographies

Please provide if possible any additional information regarding your SCM environment. Additional information such as the # of Distribution Centers, SKU Volumes, Geographies, may help to provide a better estimate for sizing your system.

Additional Information

2.5 Special Instructions for Installed i2 Customers or Upgrade Customers

In general, this sizing exercise is intended for new i2 implementations. However, customers who are expanding an existing i2 installation with new application modules or additional users may use a sizing estimate to help determine the additional resource requirements.   Please provide any previous sizing estimates performed as well as new system requirements. Also, please provide your current system environment information and state whether you intend to use current hardware or plan to add/upgrade hardware.

3.0 CONTACT INFORMATION

Please fill in the information on the following contact points. If unknown or not applicable, leave blank.

Company Name	
Street Address	
City, State/Province Zip/Postal Code, Country	
Industry	
Short Business Description	

Customer Contact			
Title			
Phone Number		**Fax Number**	
E-mail Address			

i2 Contact			
Phone Number		**Fax Number**	
E-mail Address			

i2 Value Added Reseller			
VAR Contact			
Phone Number		**Fax Number**	
E-mail Address			

IBM SCM Specialist			
Phone Number		**Fax Number**	
E-mail Address			

Business Partner Company	
Contact	
Phone Number	**Fax Number**
E-mail Address	

4.0 GENERAL SIZING QUESTIONS

In this section, you will tell us about your hardware/software environment. Some of the subsections require responses; others are optional.

4.1 i2 Software Applications

i2 Value Chain	i2 Software Application
Supply Chain Management	❑ Supply Chain Planner ❑ Factory Planner Discrete ❑ Factory Planner Process ❑ Demand Fulfillment ❑ Transportation Manager ❑ Spare Parts Planning
Supplier Relationship Management	❑ Procurement ❑ Negotiate ❑ Strategic Sourcing ❑ Product Sourcing
Demand Chain Management	❑ Demand Planner ❑ Demand Manager
Infrastructure	❑ Front Bus ❑ Back Bus ❑ ODS ❑ ADW
Content	❑ Discovery Knowledge Manager

i2 Industry Solutions Template	
❑ Retail	❑ High-Tech
❑ Utilities	❑ Mill Products
❑ Telecom	❑ Pharmaceutical
❑ Banking	❑ Oil + Gas
❑ Insurance	❑ Service Provider
❑ Automotive	❑ Engineering + Construction
❑ Healthcare	❑ Consumer Products
❑ Public Sector	❑ Aerospace + Defense
❑ Media	❑ Other

4.2 Current System

Answer the following questions about your currently installed i2 system (if applicable).

Note: This sizing exercise is intended for new i2 implementations and for customers who are expanding an existing i2 installation with new i2 modules or additional users (refer to the Special Instructions for Installed i2 Customers in last section of the previous document).

Question	Development	QAS	Production	Neither
Are you currently running i2 in production and/or non-production? (Check all that apply)				
Current i2 software release?				n/a
Current hardware systems/models for i2?				n/a
Current i2 database system?				n/a
Comments:				

4.3 Planned Hardware Platform *(required)*

Which hardware platform(s) would you like to consider for this sizing estimate? Please specify machine type and operating system for the web, application, and database servers. If you want to consider more than one application server option, please describe each scenario in the comments section below.

Notes:For customers with smaller system requirements, a two-tier configuration in which one server provides both the database and application server functions may be appropriate. Designs of firewalls and load-balancing are not included in this sizing.

IBM Hardware	Web Server	Application Server	Database Server	Other Server
pSeries				
RS/6000				
xSeries (W2K)				
Comments:				

4.4 i2 System Landscape *(required)*

A system landscape consists of the i2 systems and clients that are needed for production. Once the system landscape has been defined, you create an implementation strategy for the setup and maintenance of the systems and clients within this landscape.

IBM and i2 strongly recommend having a three-system landacape. A three-system landscape is comprised of a a development system, a quality assurance system and a production system. This configuration ensures the proper management and testing of changes to the i2 system before applying them to the live production environment. While the development and quality assurance systems could be implemented on a single server, the production system has to be implemented on its own separate system.

System Landscape Definitions	
Production System	A system that contains live business data to which users have access.
Development System	A system used for ongoing customization of the i2 components and/or the development of new components.
Quality Assurance System or Consolidation System	A system that enables complete testing of upgrades and new software modules prior to implementation in the production system. This system may also be used to test modifications to system components, such as the operating system, device drivers, new hardware components, etc.
Technical Sandbox	A system that is used for Basis or DBA training and testing.
Staging System	A system that is populated with "live" data that may be used for end-user training.

System Requirements

Please input production and non-production requirements below. For each system you check, write the number of users who will be active concurrently during that system's peak processing hour, the total amount of disk space and RAM you want to allocate to the system, expected response time, and planned installation date. If no amount of disk is specified, the minimum requirements for the chosen i2 version will be applied. The quality assurance system recommendation will have the same amount of disk space as the production system to allow replication and simulation of the production system data. Please also state what typical response time is acceptable for response when running models and "what-if" scenarios.

System Environments	Number of MAX Concurrent Users	Disk space for this system?	RAM for this system?	Planned Installation Date
Production System		GB	GB	
Development System		GB	GB	
Quality Assurance System		GB	GB	
Technical Sandbox System		GB	GB	
Staging System		GB	GB	
Other		GB	GB	
Comments:				

Expected # of Instances

For each i2 module implemented, please state the expected number of "Instances" that will be used. For pilot or initial implementations it is usually recommended to start with one instance of each module. For example, some customers with large amounts of data choose to create different instances for different product types, geography, or business unit.

i2 Module	Expected # of Instances
❑ **Supply Chain Planner**	❑ _____
❑ **Factory Planner Discrete**	❑ _____
❑ **Factory Planner Process**	❑ _____
❑ **Demand Fulfillment**	❑ _____
❑ **Transportation Manager**	❑ _____
❑ **Spare Parts Planning**	❑ _____
❑ **Procurement**	❑ _____
❑ **Negotiate**	❑ _____
❑ **Strategic Sourcing**	❑ _____
❑ **Product Sourcing**	❑ _____
❑ **Demand Planner**	❑ _____
❑ **Demand Manager**	❑ _____
❑ **Front Bus**	❑ _____
❑ **Back Bus**	❑ _____
❑ **ODS**	❑ _____
❑ **ADW**	❑ _____
❑ **Discovery Knowledge Manager**	❑ _____
❑ **Supply Chain Planner**	❑ _____
❑ **Factory Planner Discrete**	❑ _____
❑ **Factory Planner Process**	❑ _____
❑ **Demand Fulfillment**	❑ _____
❑ **Transportation Manager**	❑ _____
❑ **Spare Parts Planning**	❑ _____

4.5 Production System Software Versions

Technology Questions	✔	Answer Options
What release of i2 do you plan to install? (Check ✔ one)		Release 5.2.2
		Release 6.0
		Release 6.1
		Other (specify)
What database software do you plan to use with i2? (Check ✔ one)		IBM DB2 (default)
		Oracle
		SQL Server
		Informix
		Other (specify)
What Application Server do you plan to use with i2? (Check ✔ one)		Websphere Application Server
		BEA Weblogic
What Webserver do you plan to use with i2? (Check ✔ one)		IBM HTTP Server
		Microsoft IIS
		IPlanet Webserver
What Proxy server do you plan to use with i2? (Check ✔ one)		IBM HTTP Server
		Microsoft IIS
		Other (specify)
What LDAP server do you plan to use with i2? (Check ✔ one)		IBM Directory Server
		SunOne Server
		Other (specify)
What Security software do you plan to use with i2? (Check ✔ one)		Tivoli Access Mngr
		Siteminder Policy
		Other (specify)

4.6   Network Interface

Network Questions	✓	Answer Options
What LAN network attachment do you want on your servers for connection to the client systems? (Check ✓ one)		Ethernet 100 Mbps (default)
		Token-Ring 16 Mbps
		Other, specify:

4.7   Preferred Disk Technology

Disk Technology Questions	✓	Answer Options
Please indicate your preferred disk technology? (Check ✓ one)		SCSI
		SSA
		ESS
		Other, specify:

4.8   Scalability

Critical business applications such as i2 commonly require hardware upgrades over time to meet increasing needs. The IBM server options ensure scalability to provide our customers with a path for future growth. In some sizing scenarios, several different server configurations may be able to address the sizing requirements, but the configuration options may vary in terms of their scalability.

In order for us to make the best sizing recommendation, it is important that we know how important the server scalability is to your organization. Please answer the scalability questions below.

Scalability Questions	✓	Answer Options
How important is it that the hardware configuration recommended by IBM addresses scalability for future growth? (Check ✓ one)		Very Important
		Important
		Not so Important
Comments:		

4.9 High Availability

IBM servers offer a wide range of features to address high availability. Some features come as standard, others are optional. In order for us to better determine which high availability options should be included in the recommended configuration, please indicate your preferences for high availability.

High Availability Questions	✔	Answer Options
Do you want a failover system for the production system? (Check ✔ one) If you answer **yes**, you must answer the next two questions.		Yes
		No (default)
In failover mode, what percentage of your total workload needs to run on the backup system? (Specify a percentage)		100% (default)
To which system or server do you want to failover? (Check ✔ one)		Application server (default)
		Development system
		Test system
		Separate server in idle standby
		Other, specify:
Do you want a Uninterruptable Power Supply (UPS) inlcuded in the configuration? (Check ✔ one)		Yes, for all servers
		Only for the production system
		No
Netfinity Only – In case of a disk failure, do you want hot-spare disks in the servers in order to be able to reconstruct the RAID secured configuration? (Check ✔ one)		Yes, on database servers
		No
Do you want to have redundant network attachments in your servers, whenever possible? (Check ✔ one)		Yes, for all servers
		Only for production servers
		No

4.10 Backup/Restore

Backup/Restore Questions	✔	Answer Options
Do you want a backup device included in the proposed configuration? (Check ✔ one)		Yes
		No
If you answered **yes**, do you want to have an unattended (automatic) backup, or an attended (operator-assisted) backup? (Check ✔ one)		Unattended (default)
		Attended
Do you want to consider a network attached (shared between servers), or a direct attachment (dedicated to a server) backup device? (Check ✔ one)		Network backup
		Direct attachment
		IBM to make recommendation
What is your production system backup window? (Specify *nn* number of hours)		Specify:
Do you want to do online or off-line backups? (Check ✔ one)		Online
		Off-line
Which tape media would you prefer to use for backup/restore of your system data? (Specify type of tape media)		Specify:

4.11 Project Phases and Growth

By default, this sizing estimate will predict the resources required to support the i2 activity you describe in Sections 5 and 6 of the questionnaire. If desired, you can use this section to request sizing estimates for specific project phases. A project phase may be the implementation of one or more i2 business applications, growth in terms of additional users, or growth in business volumes. See the example below.

Example of Project Phase Descriptions
Phase 1 *Implement Sales & Distribution, Materials Management, and Financial Accounting in Raleigh (20 users).*
Phase 2 *Implement Sales & Distribution, Materials Management, and Financial Accounting in Atlanta (add users).*
Phase 3 *Implement Human Resources in Atlanta (add an i2 business component and users).*
Phase 4 *Factor in 20% business growth over one year (add 20% to the overall i2 workload).*

If necessary, copy and fill-out questionnaire Section for each phase, and submit these pages along with your completed questionnaire.

Phase	Description	Start Date / Production Date	System Install Date
1			
2			
3			
Comments:			

4.12 Additional Comments

Please note any additional comments or requirements for your i2 project. For instance, you might want to provide sizing information from previous i2 installations in your company. Or, you might specify hardware requirements that you want us to take into account for model homogeneity or reuse of existing equipment.
Comments:

4.13 Next Steps

The analysis performed with the information in this document is just the first step in a series of detailed analyses that is targeted to generate a list of the anticipated hardware requirements needed in an i2 implementation. The information derived from this first analysis is not to be used as a determination of the final equipment and software requirements for an i2 installation. The assumptions used in this study may not be valid for the specific target environment in which the customer operates, so caution should be used in handling the output from this analysis.

The list of estimated resources generated from the instance information presented here should not be used to replace the Strategic Opportunity Analysis (SOA) process conducted by i2 trained consultants. The SOA is the next step of the process after this initial analysis of estimating resources is completed. You will need to contact i2 in order to inform them of the situation and allow them to perform the SOA. The SOA analysis is designed to provide a deeper inspection of the customer's enterprise and render a more accurate sizing estimation for an i2 Business Release 1 (BR1) phase that will include environmental and operational factors. The BR1 is i2's terminology for a pilot or initial test program to build and run preliminary i2 models for exploring the customer's environment. This BR1 test suite of models will be the analysis following the SOA and is designed to provide a better determination of the total resources required in the full implementation.

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