



**business solutions  
by IBM and SAP**

## **IBM mySAP.com Sizing and Planning Questionnaire**

***Send completed questionnaire to either your local IBM contact or:***

<b>North and South America</b>	IBM Americas Techline Solutions Sizing
by E-mail	eSizings@us.ibm.com
or Fax	+1 845-491-2372
<b>Europe, Middle East, and Africa</b>	IBM EMEA Techline / ISICC
IBMers send file to and then raise Techline Request through	<a href="mailto:ERPEMEA@it.ibm.com">ERPEMEA@it.ibm.com</a> <a href="http://w3-5.ibm.com/support/emea/techline">http://w3-5.ibm.com/support/emea/techline</a>
BPs send file to and then raise Techline Request through	<a href="mailto:ERPEMEA@it.ibm.com">ERPEMEA@it.ibm.com</a> PartnerInfo/PartnerLine
Others by E-mail	isicc@de.ibm.com
<b>Asia, Pacific</b>	IBM SAP International Competence Center
by E-mail	isicc@de.ibm.com
or Fax	+49 6227 73 1052

***For more information about IBM mySAP.com solutions, go to  
<http://www.ibm.com/erp/sap>***

***For online entry of data from this questionnaire, go to  
<http://service.sap.com>***

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## 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 mySAP.com project. (Section 4)
3. Complete the SAP Quicksizer Sizing questions. (Section 5)
4. Return the questionnaire to IBM, or, enter the data directly into the QuickSizer at web address: <http://service.sap.com> (you will need an OSS User ID and an SAP customer number which you can get from your local SAP representative).

## 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 mySAP.com application suite on S/390/zSeries, AS/400/iSeries, 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 mySAP.com installation.

### 2.2 What is a Sizing Estimate?

A sizing estimate is an approximation of the hardware resources required to support a mySAP.com 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 mySAP.com 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 mySAP.com implementation, we recommend that you work with an mySAP.com specialist who will help you to develop the overall system architecture.

*Sizing* the hardware requirements for each customer's mySAP.com 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 mySAP.com environment. In this case, we can complete the sizing estimate with general information about the numbers of users your IBM mySAP.com system needs to support. When you are further along in your mySAP.com implementation planning, you will know more about mySAP.com, the mySAP.com applications you plan to use, and your potential mySAP.com 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 mySAP.com, you should work with an IBM/SAP Capacity Planning consultant to monitor and predict the ongoing resource requirements e.g. for your production R/3 system.

The IBM/SAP sizing methodology is continually reviewed and revised to provide the best possible estimate of the IBM hardware resources required to run mySAP.com. Guidelines for sizing mySAP.com come from a number of sources, including SAP, SAP R/3 benchmarks, and customer feedback. Based on information from these sources and your completed sizing questionnaire, we will analyze your mySAP.com 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 mySAP.com. IBM has established the Techlines Solutions Sizing team to provide assistance to your queries and help to size and configure your mySAP.com 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 questionnaires please contact:

### For North and South Americas: 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](mailto: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 Europe , Middle East and Africa : IBM EMEA Techline Solutions Sizing

- To obtain a softcopy of the questionnaire, ask your IBM Representative or send a request to the IBM Sizing Center at [ERPEMEA@it.ibm.com](mailto:ERPEMEA@it.ibm.com)

### For ASEAN / South Asia : IBM ASEAN/SA Techline Solutions Sizing

- To obtain a softcopy of the questionnaire, ask your IBM Representative or send a request to the IBM Sizing Center at [techline@my.ibm.com](mailto:techline@my.ibm.com)

### For others

- Contact the IBM SAP International Competency Center at [isicc@de.ibm.com](mailto:isicc@de.ibm.com)

For additional information on IBM and mySAP.com, go to

External : <http://www.ibm.com/erp/sap>

Internal : <http://w3.isicc.de.ibm.com>

### Other contacts for IBM Internal

*For Europe , Middle East and Africa : IBM EMEA Techline Solutions Sizing*

<http://w3-5.ibm.com/support/emea/techline>

*For Asia Pacific , ASEAN /SA : IBM Asia Pacific Techline Solutions Sizing*

<http://w3-6.ibm.com/support/ap/asean/techline/>

## 2.4 User-Based vs. Quantity structure Based Sizing

You must decide whether you want a *user-based* sizing or a *quantity structure-based* sizing. If you have limited information about your planned mySAP.com implementation, we suggest a user-based sizing. If you have more detailed knowledge of mySAP.com and your planned implementation, you may prefer a quantity structure-based sizing. Since the quantity structure-based sizing requires more detailed information, it may provide a more accurate estimate of the hardware resource requirements. If you do select the quantity structure-based sizing, you must answer the quantity structure-based sizing questions, as well as the user-based sizing questions. When we complete the sizing estimate, we will evaluate both the user-based and quantity structure-based sizing results, and recommend the larger of the two solutions.

## 2.5 IBM/SAP Sizing Methodology and Terminology

### Sizing Methodology

The objective of the IBM/SAP 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 mySAP.com online and batch processing for the peak hour. In the Sizing Center, we will use the IBM/SAP sizing tools to convert your

questionnaire responses into potential mySAP.com 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**

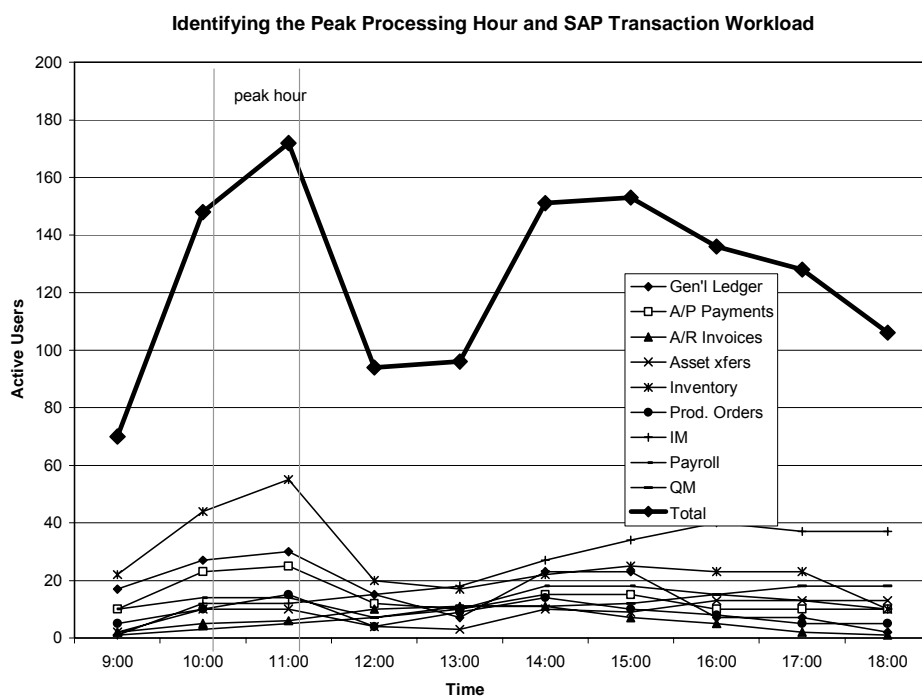
Before you can specify your online and batch transaction volumes, you must identify your peak hour of processing. The peak hour is the busiest hour of activity from an information-processing standpoint. It is the hour in which the CPU utilization is the highest. In identifying your peak hour, consider 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 mySAP.com modules.

Typically, the peak hour occurs somewhere between 8:00 a.m. and 6:00 p.m., but this can vary. In the illustration on the next page, the thick line shows the transaction volumes for all of the SAP R/3 modules used in one organization, with the peak hour occurring from 10:00 a.m. to 11:00 a.m.

**Identifying the Online Processing Volumes**

Once you have identified the peak hour, you must identify the mySAP.com functions that will be in use during that hour (refer to the illustration below). For a user-based sizing, you will identify the mySAP.com 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. For example, in a user-based sizing, you would indicate that 20 Financial Accounting (FI) users will be active; for a quantity structure-based sizing, you would specify some number of FI transactions like A/P Payments, A/R Invoices, GL Postings, etc.

*Note: It is important to understand that you should not include every mySAP.com module/transaction to be used by your organization. Instead, you should report only those mySAP.com 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 the calculation by the SAP quicksizer. For a quantity structure-based sizing, you will identify the batch quantity structure volumes for the peak hour in the input “quantity structure II” section of the SAP quicksizer.

*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.*

**Sizing Assumptions**

This sizing estimate will predict the resources required to support your mySAP.com activity with default values for CPU utilization, batch, spool, and reporting. The default values have been determined as a result of our experience with many mySAP.com projects and sizings. You may, however, change one or more of the default sizing assumptions. The sizing assumptions and default values are listed in section ahead

**2.6 Sizing Assumptions**

The SAP Quick Sizer Tool uses the following assumptions.

Questions	Default
Power user think time (user characteristics are described in Section 5)	10 seconds
Standard user think time (user characteristics are described in Section 5)	30 seconds
Occasional user think time (user characteristics are described in Section 5)	360 seconds
Amount of data created daily per user?	1.5 MB
Data retention period for disk storage?	1 year
Number of working days per year?	Asia/Pacific 300
	Americas 250
	Europe 200

**2.7 Special Instructions for Installed R/3 Customers or Upgrade Customers**

In general, this sizing exercise is intended for new mySAP.com implementations. However, customers who are expanding an existing SAP R/3 installation with new application modules or additional users may use a sizing estimate to help determine the additional resource requirements. In these cases, the sizing estimate must be used in conjunction with an *IBM Insight for SAP R/3 Analysis*, a no-charge IBM offering that provides a workload analysis of the customer’s currently installed R/3 system.

When the sizing request accompanies an Insight Analysis, the information provided in the sizing questionnaire should reflect the user or transaction volumes for the new workload only, not the workload for the existing SAP R/3 system. When specifying the user or transaction volumes, only the new SAP R/3 modules or new users should be listed in Sections 5 and 6 of the questionnaire. To complete the sizing estimate, we will obtain the resource requirements for the existing system from the results of the Insight Analysis and the new workload requirements from the sizing questionnaire.

For more information about *IBM Insight for SAP R/3*, go to <http://www.ibm.com/erp/sap/insight>

### 3.0 CONTACT INFORMATION

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

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

<b>Customer Contact</b>			
<b>Title</b>			
<b>Phone Number</b>		<b>Fax Number</b>	
<b>E-mail Address</b>			

<b>SAP Contact</b>			
<b>Phone Number</b>		<b>Fax Number</b>	
<b>E-mail Address</b>			

<b>SAP Value Added Reseller</b>			
<b>VAR Contact</b>			
<b>Phone Number</b>		<b>Fax Number</b>	
<b>E-mail Address</b>			

<b>IBM ERP Specialist</b>			
<b>Phone Number</b>		<b>Fax Number</b>	
<b>E-mail Address</b>			

<b>Business Partner Company</b>			
<b>Contact</b>			
<b>Phone Number</b>		<b>Fax Number</b>	
<b>E-mail Address</b>			

## 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 mySAP.com Areas of Application

#### mySAP.com Areas of Application

Area	MySAP.com Areas of Application
Enterprise Resource Planning	<input type="checkbox"/> SAP Enterprise – Core R/3 (the backend System) Including Specialized Industry Solutions in mySAP.com Environment
Business Intelligence	<input type="checkbox"/> SAP BW - Business Information Warehouse <input type="checkbox"/> SAP SEM - Strategic Enterprise Management <input type="checkbox"/> SAP KM – Knowledge Management
Supply Chain Management	<input type="checkbox"/> SAP APO – Advanced Planner & Optimizer
Customer Relationship Management (CRM)	<input type="checkbox"/> Field Sales <input type="checkbox"/> Customer Service <input type="checkbox"/> Interaction Center <input type="checkbox"/> Field Service & Dispatch <input type="checkbox"/> Internet Sales <input type="checkbox"/> Sales <input type="checkbox"/> Marketing
Infrastructure & Middleware	<input type="checkbox"/> mySAP.com Workplace System <input type="checkbox"/> mySAP.com Internet Transaction Server <input type="checkbox"/> mySAP.com Web Application Server <input type="checkbox"/> R/3 Plug-In (Extractors) for mySAP.com Components
Others	<input type="checkbox"/> SAP Employee Self Service <input type="checkbox"/> SAP Employee Health & Safety <input type="checkbox"/> SAP Real Estate <input type="checkbox"/> SAP Product Lifecycle Management

mySAP.com Industry Solutions	
<input type="checkbox"/> Retail <input type="checkbox"/> Utilities <input type="checkbox"/> Telecom <input type="checkbox"/> Banking <input type="checkbox"/> Insurance <input type="checkbox"/> Automotive <input type="checkbox"/> Healthcare <input type="checkbox"/> Public Sector <input type="checkbox"/> Media	<input type="checkbox"/> High-Tech <input type="checkbox"/> Mill Products <input type="checkbox"/> Pharmaceutical <input type="checkbox"/> Oil + Gas <input type="checkbox"/> Service Provider <input type="checkbox"/> Engineering + Construction <input type="checkbox"/> Consumer Products <input type="checkbox"/> Aerospace + Defense <input type="checkbox"/> Other

mySAP.com Extended Solution
<input type="checkbox"/> SAP Portals <input type="checkbox"/> SAP Marketplace



## 4.2 Current System

Answer the following questions about your currently installed SAP R/3 system (if applicable).

*Note: This sizing exercise is intended for new R/3 implementations and for customers who are expanding an existing R/3 installation with new R/3 modules or additional users (refer to the Special Instructions for Installed R/3 Customers in last section of the previous document).*

Question	Development	QAS	Production	Neither
Are you currently running mySAP.com in production and/or non-production? (Check <input type="checkbox"/> all that apply)				
Current mySAP.com software release?				n/a
Current hardware systems/models for mySAP.com?				n/a
Current R/3 database system?				n/a
<b>Comments:</b>				

## 4.3 mySAP.com System Landscape (required)

A system landscape consists of the mySAP.com 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 SAP strongly recommend having a three-system landscape. A three-system landscape is comprised of a development system, a quality assurance system and a production system. This configuration ensures the proper management and testing of changes to the mySAP.com 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	
<b>Production System</b>	A system that contains live business data to which users have access.
<b>Development System</b>	A system used for ongoing customization of the mySAP.com components and/or the development of new components.
<b>Quality Assurance System or Consolidation System</b>	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.
<b>Technical Sandbox</b>	A system that is used for Basis or DBA training and testing.
<b>Staging System</b>	A system that is populated with "live" data that may be used for end-user training.

### Production System Requirements

You will provide detailed information on the production system requirements in Sections 5 and 6.

### Non-Production System Requirements

In addition to the development and quality assurance systems, you may want to add other non-production systems to the landscape. In the table on the next page, specify the non-production system requirements. Check all of the non-production systems that will be included in the landscape.

For each system you check, write the number of users who will be active concurrently during that system's peak processing hour and the total amount of disk space you want to allocate to the system. If no amount of disk is specified, the minimum requirements for the chosen mySAP.com version will be applied. The quality assurance

**General Sizing Questions**

system recommendation will have the same amount of disk space as the production system to allow replication and simulation of the production system data.

Non-Production Systems	Number of active users?	Disk space for this system?	Planned Installation Date
Development System		GB	
Quality Assurance System		GB	
Technical Sandbox System		GB	
Staging System		GB	
Other		GB	
<b>Comments:</b>			

Question	Answer
Did you consult with your SAP implementation partner to complete the non-production system questions above? (Circle one) If you answered <b>no</b> , before ordering the non-production system(s), you must work with your implementation partner to determine the requirements for each system (i.e., number of users and disk space), and then request a re-sizing for the system.	yes or no

**4.4 Planned Hardware Platform (required)**

Which hardware platform(s) would you like to consider for this sizing estimate? Check  a database server and one of its application server options. If you want to consider more than one application server option, please describe each scenario in the comments section below.

*Note: 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.*

**SAP R/3 Enterprise**

✓	Database Server	Application Server(s)							
	zSeries		pSeries		RS/6000 SP		xSeries		zSeries
	pSeries		pSeries		RS/6000 SP		xSeries		
	RS/6000 SP				RS/6000 SP				
	xSeries (W2K, Linux)						xSeries		
	iSeries						xSeries		iSeries
<b>Comments:</b>									

Other areas (like APO, BW, CRM, etc) :

✓	Database Server	Application Server(s)							
	zSeries		pSeries		RS/6000 SP		xSeries		zSeries
	pseries		pSeries		RS/6000 SP		xSeries		
	RS/6000 SP				RS/6000 SP				
	xSeries (W2K, Linux)						xSeries		
	iSeries						xSeries		iSeries
<b>Comments:</b>									

**4.5 Production System Software Versions**

Technology Questions	✓	Answer Options
What release of mySAP.com do you plan to install? (Check ✓ one)		Release 4.7
		Release 4.6(default)
		Release 4.5
		Other, specify:
What database software do you plan to use with mySAP.com? (Check ✓ one)		IBM DB2 (default)
		Oracle
		SQL Server
		Informix
		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:
S/390 Only – Which network communication technology do you want between the S/390 database server and the RS/6000 or Netfinity application servers? (Check ✓ one)		Gigabit Ethernet via an OSA-Express attachment <b>(Recommended)</b>
		ATM 155, or Fast Ethernet via an OSA-Express attachment
		FDDI, Fast Ethernet, or ATM 155 via an OSA-2 attachment
		ESCON (MCA, PCI, or 2216)
		Other, specify:

#### 4.7 Preferred Disk Technology

Disk Technology Questions	✓	Answer Options
Please indicate your preferred disk technology? (Check ✓ one)	<input type="checkbox"/>	SCSI
	<input type="checkbox"/>	SSA
	<input type="checkbox"/>	ESS
	<input type="checkbox"/>	Other, specify:

#### 4.8 Scalability

Critical business applications such as mySAP.com 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)	<input type="checkbox"/>	Very Important
	<input type="checkbox"/>	Important
	<input type="checkbox"/>	Not so Important
<b>Comments:</b>		

#### 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 <b>yes</b> , you must answer the next two questions.	<input type="checkbox"/>	Yes
	<input type="checkbox"/>	No (default)
In failover mode, what percentage of your total workload needs to run on the backup system? (Specify a percentage)	<input type="checkbox"/>	100% (default)
To which system or server do you want to failover? (Check ✓ one)	<input type="checkbox"/>	Application server (default)
	<input type="checkbox"/>	Development system
	<input type="checkbox"/>	Test system
	<input type="checkbox"/>	Separate server in idle standby
	<input type="checkbox"/>	Other, specify:
S/390 Only – For what functions do you want to provide high availability? (Check ✓ all that apply)	<input type="checkbox"/>	DB Server
	<input type="checkbox"/>	CI (e.g., MSG/ENQ)
Do you want a Uninterruptable Power Supply (UPS) included in the configuration? (Check ✓ one)	<input type="checkbox"/>	Yes, for all servers
	<input type="checkbox"/>	Only for the production system
	<input type="checkbox"/>	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)	<input type="checkbox"/>	Yes, on database servers
	<input type="checkbox"/>	No
Do you want to have redundant network attachments in your servers, whenever possible? (Check ✓ one)	<input type="checkbox"/>	Yes, for all servers

**General Sizing Questions**

possible? (Check <input checked="" type="checkbox"/> one)		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 <input checked="" type="checkbox"/> one)		Yes
		No
If you answered <b>yes</b> , do you want to have an unattended (automatic) backup, or an attended (operator-assisted) backup? (Check <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> one)		Network backup
		Direct attachment
		IBM to make recommendation
What is your production system backup window? (Specify <i>nn</i> number of hours)		Specify:
Do you want to do online or off-line backups? (Check <input checked="" type="checkbox"/> 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 mySAP.com 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 mySAP.com 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 mySAP.com business component and users).

**Phase 4** Factor in 20% business growth over one year (add 20% to the overall SAP R/3 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			
<b>Comments:</b>			

4.12 Additional Comments

Please note any additional comments or requirements for your mySAP.com project. For instance, you might want to provide sizing information from previous SAP 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:**

## **5.0 QUESTIONS FROM THE SAP QUICKSIZER**

Print version  
of the Quick Sizer Input Screens

October 2002

Please note that the Quick Sizer is subject to regular changes several times per year. Please make sure you have the most current version available. (<http://service.sap.com/quicksizing>)

**Enterprise Portal**

**Enterprise Portal 5.0**

<b>Logon Phase</b>	
Highest Number of users who log on in parallel	

<b>Usage</b>	
Highest Number of concurrent users per hour	

<b>Content Management</b>	
How many clicks (in %) access Content Management	%

**Comments and Further Information about this Page**



**SAP R/3 Enterprise**

Please enter the number of **peak concurrentkly active users** in the table below. The numbers in the table should represent all those users who will be active during a PEAK hour of the day. **The “low” users will be changing screens once every 6 minutes. The “medium” users will be changing screens twice a minute, and the “high” users will be changing screens 6 times a minute. Do not double count any users.**

**Users**

		Low	Medium	High
<b>FI</b>	Financial Accounting			
<b>FI-AA</b>	Asset Accounting			
<b>TR</b>	Treasury			
<b>CO</b>	Controlling			
<b>EC</b>	Enterprise Controlling			
<b>SD</b>	Sales & Distribution			
<b>MM</b>	Materials Management			
<b>LE-WM</b>	Warehouse Management			
<b>QM</b>	Quality Managerment			
<b>PM</b>	Plant Maintenance			
<b>CS</b>	Customer Service			
<b>PP</b>	Production Planning			
<b>PS</b>	Project System			
<b>PA</b>	Personnel Management			
<b>PA-PD</b>	Personnel Development			
<b>BC</b>	Basis Components			
<b>BWP</b>	Business Work Place			

**Comments and Further Information about this Page**

**Quantity Structure I: Dialog & Batch**

Component & Object	Number of Objects Created per Year	Sub-Object of the Object	Average No. of Sub-Objects (Natural numbers only)	Retention Period [Months]	Highload Phase		Object Changes (%)	Object Display (%)
					Number of Objects Created per Day	Execution period [hh:00 - hh:00]		
FI Documents		Line items						
FI-TV Receipts		Line items						
TR Postings								
CO Documents		Line items						
CO-PA Orders transferred from SD-SLS		Line items						
CO-PA Billings transferred from SD-BIL		Line items						
CO-PA Documents transferred from FI		Line items						
EC Reports		Lines						

Component & Object	Number of Objects Created per Year	Sub-Object of the Object	Average No. of Sub-Objects (Natural numbers only)	Retention Period [Months]	Number of Objects Created per Day	Execution period [hh:00 - hh:00]	Object Changes (%)	Object Display (%)
SD Customer Inquiries		Line items						
SD-SLS Sales Orders		Line items						
SD-BIL Invoices		Line items						
SD-POS-IN Sales Data / Idocs		Line items						
MM-PUR Purchase Orders		Line items						
MM-IM Materials Movements		Line items						
LE-WM Transfer Orders		Line items						
LE-SHP Delivery Notes & Goods Issues		Line items						
QM Inspections		Inspection Characteristics						
PM Orders		Components						
CS Orders		Components						

Component & Object	Number of Objects Created per Year	Sub-Object of the Object	Average No. of Sub-Objects (Natural numbers only)	Retention Period [Months]	Number of Objects Created per Day	Execution period [hh:00 - hh:00]	Object Changes (%)	Object Display (%)
PP-SOP Planned Orders		Components						
PP-SFC Production Orders		Components						
PS Projects		WBS elements						
		Networks						
		Activities						
PT Time data								
BC Printed documents								
BWP Business Work Place								
		Internal mails						
		External mails						

**Comments and Further Information about this Page**

**Quantity Structure II: Batch**

Component Object	Description	Maximum No. of Objects	Execution Time Period [hh:00 - hh:00]
FI-AA Assets depreciation	Number of Assets		
CO-OM-OPA Order Settlement	Number of orders allocated per period		
CO-OM-OPA Overhead Rate	Number of orders per period with overhead rates		
CO-OM Assessment	Number of sender-receiver relations for all cycles		
PA Employee	Number of employees		
PT Time Evaluation	Number of processed time pairs		
PY Payroll	Average Number of retro calculations per payroll		

All Questions in this section must be completed in order to obtain a workload estimate.

<b>MRP Object</b>	<b>Description</b>	<b>Maximum No. of Objects</b>	<b>Execution Time [hh:00 - hh:00]</b>
PP-N1	Number of planned orders per day		
PP-N3	Average number of components per BOM		
PP-N4	Number of purchase order line items for reorder-point driven materials per day		
PP-N5	Number of purchase order line items/schedule lines for non reorder-point driven mat. p. day		
PP-H0	Size of planning horizon in days		
PP-P1	Number of BOM structure changes per day in %		
PP-P2	Variant Configuration: Average number of BOM positions with object dependencies in %		
PP-P3	How many orders use Lead Time Scheduling in %		

**Comments and Further Information about this Page**

**SAP Business Information Warehouse 3.0**

**Users (for CPU sizing)**

For user-based sizing, two factors count: The user activity patterns during the day and the types of queries they perform. When you enter the number of users, we assume a standard activity pattern which you can overwrite at any time in the table below.

A note of caution: "Power" users (those doing adhoc reports), require a lot of CPU resources

User Activity		
InfoConsumer	Executive	Power User

Query Distribution				
Query Type	Report Viewing	OLAP Analysis	Data Extrapolation	Total Percent
InfoConsumer	80%	20%		%
Executive	50%	50%		%
Power User			100%	%

**InfoCube (for Disk Sizing)**

If you select one of the predefined InfoCube types, the data for dimensions and key figures are filled automatically when you refresh the page. You can overwrite the standard values at any time. If you choose self-defined as an InfoCube type, you can find a list of typical InfoCubes in the online help to choose data from.

These Entries determine the the record length of the InfoCubes				These Entries determine the total number of records in the InfoCube		
Name	Type (predefined or self defined)	Dimensions	Key Figures	Initial Load	Periodic Load	No. of Periods

**ODS Object (for Disk Sizing)**

Name	No. of Numeric Fields	No. of Char. Fields	Initial Load	Periodic Load	No. of Periods

**Comments and Further Information about this Page**



**CRM Customer Relationship Management**

**User Based Sizing**

If some of your users work with several different components, attribute them to the component *they work with most of the time.*

The users in the table below should represent **concurrently active users during a peak time.** See definition of user types in “SAP R/3 Enterprise” section

Please enter the number of Concurrent CRM users and how they will work with the system:

	Low	Medium	High
Enterprise Buyer Professional			
CRM Online Sales orders			
CRM Online Service Transactions			
CRM Online Opportunity Management			
CRM Online Activity Management			

Enter below how many of the above Users enter objects such as customer orders or opportunities using the Customer Interaction Center.

	Low	Medium	High
Customer Interaction Center			

	Catalog Browsing	Filling Shopping Cart & Ordering
Internet Sales		

	Parallel Logons
Mobile Sales	
Mobile Service	

**Quantity Structure or Transaction based sizing**

The information you provide in this section is used to determine disk size and CPU consumption of the CRM Server. Note that depending objects created in a backend system must be considered separately.

Component & Object	Number of Objects Created per Year	Sub-Object of the Object	Average No. of Sub-Objects (Natural numbers only)	Retention Period [Months]	Number of Objects Created per Day	Execution period [hh:00 - hh:00]	Object Changes (%)	Object Display (%)
Internet Sales Orders		Line Items						
Mobile Sales		Line Items						
Enterprise Buyer Orders		Line Items						
CRM Sales Orders		Line Items						
Customer Interaction Center Calls								
Opportunity Management Opportunities								
Activity Management Activities								

Enter any kind of additional informatin with regard to this project here

**SAP Advanced Planner and Optimizer Release 3.0**

**Demand Planning**

Total number of characteristic combinations	
Total number of key figures	
Number of keyfigures in livecache (in %)	
Total number of periods in planning horizon	
Total number of periods in historical horizon	
Total number of planning versions stored in InfoCube	
Total number of planning versions stored in LiveCache	
Retention period for data records in InfoCube in Months	
Characteristic combinations used for planning run in % of question 1 above	
Execution period of planning run	From <input type="text"/> To <input type="text"/>
Users of Demand Planning (as additional load)	

**Master Data**

Number of location products	
Total Number of Resources	
Number of Warehouse Stocks	

**Different Types of Orders or Requisitions Used for Planning**

Average Number of Objects in Planning Horizon		Average Number of Subcomponents per Object	
Sales Order		Delivery Schedules	
Purchase Orders or Purchase Requisitions		Delivery Schedules	
Transfer Orders		Products (Materials)	
Forecast Orders		Time Buckets	
Planned Orders with SNP Production process models (PPMs)		Components	
		Operations	
		Operation Steps (activities) per operation	
Average Number of planned orders and Manufacturing Orders with PP-PPMs		Components	
		Operations	
		Operation Steps (activities) per operation	
		Alternative resources per Activity	

		Parallel capacity requirements per operation step	
--	--	---	--

**Time Series liveCache in SNP**

Number of Location Products	
No. of Key Figures	
No. of time buckets	

**Supply Network Planning**

Number of Location Products planned in heuristic planning run	
Execution period of the planning runs	From <input type="text"/> To <input type="text"/>
Users of Supply Network Planning (as additional load)	

**Production Planning – Detailed Scheduling**

Users of Planning Table (as additional load)	
--	--

**Available-To-Promise (ATP)**

Number of ATP Requests against warehouse stocks per hour	
Number of rule-based ATP Requests per hour	
Number of CTP requests per hour	

**Integration of orders transferred to and from APO per hour**

Number of Sales Orders	
Number of Manufacturing Orders	
Number of Purchase Requisitions	

**Miscellaneous**

Number of planning versions (including active version)	
--	--

**Comments and Further Information about this Page**

**SAP Utilities**

**Dialog part one:** Here, you must fill in all fields completely

Total number of business partners.		Number of budget billings per year	
Total number of contracts		Number of billing cycles per year	
Number of meters in the network		Average number of billing lines per bill	
Number of contract accounts		Average number of print lines per bill	
Retention period for the above objects			

**Dialog part two:** Here, you can fill in single average fields, single highload fields, or complete lines

Object	Average number created per year	Created during highload phase	Time period of highload phase
Customer-Overviews			
Customer contacts			
Move-in			
Move-out			
<b>Duration of highload phase for the above objects; mandatory, if you entered values for the highload phase.</b>			

**Batch**

Here, you must fill in all fields completely

No. of business partners (equal to dialog input)		Minimum no. of days to complete one batch cycle		Batch processing interval (time period)	
---	--	--	--	---	--

Enter any kind of additional information with regard to this project here.



## 6.0 APPENDIX: SAP QUICKSIZER HELP SCREENS

Following you can find all the help documentation being available in the SAP quicksizer for the different input screens and the result screen.

### Enterprise Portal Input

Term	Definition
Enterprise Portal	<b>Definition</b> Currently, the questions for the Enterprise Portal aim at determining the size of the Portal Server and the Unification Server. For more information see SAP Note 519077.
	<b>Comment</b> The sizing model for the Enterprise Portal includes primarily CPU and memory sizing. We assume that 20% of all hits access the Unification Server, to reflect, for example, Drag & Relate.
Parallel logon	<b>Definition</b> Enter the highest number of users (2,000, for example) who log on to the Portal within 1 hour (e.g. 8 am - 9 am). If the users will start the Portal over a period of two hours (e.g. 8 am - 10 am), you then need to size only <b>half</b> of the users.
Concurrent users	<b>Definition</b> To determine the highload phase, we ask for the highest number of users you can imagine will work simultaneously in the system within one hour. We assume that they navigate through pages that contain four iViews. If they open documents or start transactions, fill in the values for Content Management.
	<b>Comment</b> We assume a distribution of 60% users with a think time of roughly 300 seconds between two clicks, 34% with about 120 seconds think time and 6% with a think time of 10 seconds.
Content Management	<b>Definition</b> Enter how many clicks out of 100 access documents.

### R/3 User-based input

Term	Definition
User-based sizing	For sizing we assume active users who go through a given number of business processes in a given time period. Since not all active users equally put load on the system or consume system resources, we distinguish between three categories to represent typical activity patterns of users: low, medium, and high. Comment: In case some of your users work with several different components attribute them to the component they work with most of the time.
Low / Occasional User	An occasional user is logged on and consumes system resources. We assume that the occasional user accesses the system from time to time, fitting the work profile of an information user or an executive. From a technical viewpoint, this user type typically performs around 400 dialog steps (equivalent to approximately 400 screen changes) per week. Assuming a working week of 40 hours, this amounts to ten dialog steps per hour or one every six minutes. In this column you enter the number of users who are logged on and use it every once in a while during the day. Comment: For calculating the optimum memory consumption we assume that these users typically work during peak hours. For minimum requirements they are omitted. Also, they have no influence on disk sizing.
Medium User Accountant / Clerk	We assume that this user definition represents the work profile of accountants, clerks or office personnel. From a technical viewpoint, this user type typically performs around 4,800 dialog steps per week. Assuming a working week of 40 hours, this amounts to 120 dialog steps per hour or one every 30 seconds. In this column you enter the number of users who are logged on and use it regularly during the day.
High User Data entry user, Telesales User, Power User	We assume that this user definition represents the work profile of users in the telesales environment, data entry users or power users such as application developers. From a technical viewpoint, this user type typically performs an average of around 14,400 dialog steps (screen changes) per week. Assuming a working week of 40 hours, this amounts to 360 dialog steps an hour or on every 10 seconds. In this column you enter the number of users who are logged on and use it intensively during the day.

### Quantity Structure Based Input I

Quantity Structure I: Mandatory Input	If you enter the number of objects for a certain component, the number of objects, the average number of sub-objects (in natural numbers, no decimals!) and the retention period are mandatory. Comment: A default-value of twelve months for the retention period is offered by the program. The input is used for disk sizing and average CPU sizing (between 8 am and 4 pm).
Optional Input	Optionally, peak sizing is possible. In that case enter a number of peak-objects and the respective peak processing period. You can also optionally enter the number of displays and the number of changes.
Component & Object	Component or object of the system corresponding to the component hierarchy. A component can be a production order or a Financial document.

	<p>The Quick Sizer calculates with the number of respective objects created per year. Calculations are based on the following assumptions:  Number of working days per year in Europe: 200 days  Number of working days per year in USA: 250 days  Number of working days per year in Asia: 300 days  8 hour working day from 8:00 am - 4:00 pm.</p>
Sub-Component	<p>Component at a lower level of the component hierarchy in the R/3 System. For the calculation we need to know the number of subitems. For example: The number of lines per printed document, the number of line items per purchase order, or the number of recipients per mail.</p> <p>The Quick Sizer calculates with the average no. of number of sub objects, that is, line items, lines, or mail recipients created per year.</p> <p>Note: Enter only rounded up natural numbers without decimals.</p>
Retention Period (Months)	<p>The time in months that the object remains in the system before it gets archived and deleted in the database. The time objects remain in the system influences the disk size to a great extent. We therefore recommend you consider data archiving at a very early stage in your project.</p>
Highload Phase	<p>For the calculations of your CPU requirements, we need to know the volumes processed per day. Here, it is important to know the figures during a particularly active day or season in the year (such as Christmas) where the volumes processed are much higher than usual.</p> <p>In order to determine the peak load the system will have to handle, we ask you to fill in the number of objects that are created in the highload phase. A telesales company, for example, could enter the number of customer orders created in the peak phase of the day, for example between 3 pm and 9 pm.</p> <p>The highload time is selected in clock time (e.g. 15 - 21). You can also use the highload phase for entering batch processes, for example the number of billings created between 9 pm and 12 pm.</p>
% of Object Changes and Display	<p>Enter how often a newly created object is changed or displayed (in percent on average, without percentage sign).  Examples:  An order is always changed or displayed after being created: Enter 100  Every second order is changed or displayed after being created: Enter 50  Every order is changed or displayed twice after being created: Enter 200</p>

### **Business terms explained**

FI Documents	<p>Document for proof of a business transaction. They may include accounting documents, sample documents and recurring entry documents. Whereas accounting documents are a representation of the original document in the system, sample and recurring entry documents are simply templates to simplify entry of accounting transactions.</p> <p>Comment: Enter the number of all financial documents including those that originate from material movements.</p>																		
FI-TV Receipts	Number of receipts (Business Trip Management).																		
FI-TV Line items	Average number of line items per receipt, for example travel costs, meals, or accommodations.																		
TR postings	<p>To carry out a posting, the flows of the transactions/positions to be posted are selected. The posting run transfers flows and posting information to Financial accounting where the corresponding documents are generated. In Treasury, the posting run can be carried out manually (for irregular posting activities) or automatically (for recurring flows that pre condition-based). The Treasury payment program connection and debit position and clearing are directly linked to the posting run.</p> <p>Comment: Financial postings resulting from loan postings have to be treated separately. We assume that a posting (document) in loan has an average of 1.5 posting items (document items). Master data are calculated by assuming 8 posting items per month and per loan. This share is independent of the residence time.</p>																		
CO Line items	<p>Number of line items posted to CO (orders, cost centers, WBS). For postings within CO, each document consists at least of two line items. Postings to statistical orders consist at least of three line items. Activity allocations add another line to the posting.</p> <p>Example</p> <table> <tr> <td>Posting from</td> <td>Posting to</td> <td>Number of line items</td> </tr> <tr> <td>Cost center</td> <td>Cost center</td> <td>2</td> </tr> <tr> <td>Cost center</td> <td>Statistical order</td> <td>3</td> </tr> </table> <table> <tr> <td>Posting activity calculation from</td> <td>Posting activity calculation to</td> <td>Number of line items</td> </tr> <tr> <td>Cost center</td> <td>Cost center</td> <td>3</td> </tr> <tr> <td>Cost center</td> <td>Statistical order</td> <td>4</td> </tr> </table>	Posting from	Posting to	Number of line items	Cost center	Cost center	2	Cost center	Statistical order	3	Posting activity calculation from	Posting activity calculation to	Number of line items	Cost center	Cost center	3	Cost center	Statistical order	4
Posting from	Posting to	Number of line items																	
Cost center	Cost center	2																	
Cost center	Statistical order	3																	
Posting activity calculation from	Posting activity calculation to	Number of line items																	
Cost center	Cost center	3																	
Cost center	Statistical order	4																	



	<p>Comment: If you use detailed planning, you should add line items created during planning.  Line items per year = DIALOG line items + sum of all line items posted during all period-end closings within a year  As the highload phase is used for CPU calculation, you enter only the line items posted in dialog. There are different formulas used for dialog transactions and batch transactions as shown in the list below. (D) = dialog (B) = batch postings into CO, e.g.</p> <ul style="list-style-type: none"> <li>• (D) FI-postings into CO</li> <li>• (D) Material movements into CO</li> <li>• (D) Completion confirmations(PP,PM)</li> </ul> <p>CO-internal allocations, e.g.</p> <ul style="list-style-type: none"> <li>• (D) Reposting</li> <li>• (D) Activity allocation</li> <li>• (B) Indirect activity allocation</li> <li>• (B) Overhead rates</li> <li>• (B) Settlement</li> <li>• (B) Assessment</li> <li>• (B) Distribution</li> <li>• (B) Periodic reposting</li> </ul>
CO-PA Profitability Analysis	<p>In our experience, the number of documents that you transfer to CO-PA from Sales and Distribution (SD) or Financial Accounting (FI) serves as a good indicator of the disk space and system load that CO-PA represents. Using this indicator simplifies the sizing process because the Quick Sizer no longer needs to take into account the contributions from planning, cost center assessment, the information system, realignments, or settlement. If your requirements in one of these areas are high (for example, a large volume of data needs to be processed by a large number of users during peak system load times), you should contact your hardware partner or SAP. To gain a deeper understanding of the factors that can influence sizing and performance, see the information contained in <a href="http://service.sap.com/co-pa">http://service.sap.com/co-pa</a>  Transferred Objects: If you use Profitability Analysis, SD billing documents (SD-BIL) and FI documents are transferred to CO-PA automatically. The transfer of orders (SD-SLS), on the other hand, is optional. For objects, enter the number of documents transferred per year from the respective components to CO-PA. For subobjects, enter the average number of document items in each case. You can also use the above methods to display how external data is transferred to CO-PA.</p>
EC Reports	<p>EC Enterprise Controlling allows you to control your enterprise from a corporate and a business unit perspective within one common infrastructure. It helps to speed up provision of business control information by fully automated corporate reporting from operative accounting via financial consolidation to management reporting. From EC-Enterprise Information System (EIS) top-level reports, end users can drill-down to more detailed information within EC or any other mySAP.com component.  Lines: Average number of lines of a report</p>
SD Customer Inquiries	<p>A customer request to the company for a quotation or sales information that is not binding. The request can refer to materials or services, conditions and, if necessary, delivery deadlines. It is accepted by the sales area that is then responsible for any further processing. A customer request comprises one or several items containing the required quantity of a material/service.  Line items: Number of line items per customer inquiry</p>
SD Invoices	<p>Sales and distribution document used to charge a customer for a delivery of goods or for services rendered.  Line items: Number of line items per invoice.</p>
LE-SHP Sales Order	<p>A customer request to the company for the delivery of goods or services at a certain time. The request is received by a sales area, which is then responsible for fulfilling the order.  Line items: A sales order consists of one or several items containing the quantity of the material or service specified in the order. The total quantity can be subdivided into schedule lines which contain different partial quantities and the relevant delivery dates.</p>
SD POS IN Sales data and IDOCs	<p>Number of Sales Data and IDocs created per year. The Quick Sizer assumes that for every Idoc, one material document and one billing document are generated with subsequent postings to FI. The IDocs themselves are assumed to be archived immediately.  The column "number of objects created per year" refers to the number of documents created per year. The next column "number of subobjects....." refers to the number of line items per document.  The Quick Sizer considers aggregated upload (WPUUMS). In the case of WPUBON, you will have to consider the following:  1.Number of POS transactions. This corresponds to the number of customers per store.  2.Number of items per transaction. This corresponds to the number of articles purchased by each customer.  The total number of line items is the product of number of customers and the number of articles per customers.</p>

	<p>Example: You have 500 stores with an average of 300 customers per day and an average of three articles per customers. Assuming one IDoc per store this will give you: 500 IDocs, each with 900 lines per day. Assuming 300 working days Number of objects created per year = 300 x 500 = 150000, Number of sub objects = 900 Retention period is actually that of the follow-on documents - material-, billing- and financial-documents. Comment: Number of Sales Data and IDocs created per year. The System creates one goods issue and one bill per document/IDOC including the respective number of line items. With each bill and material movement, one FI document with the respective number of line item is created. Additional postings are not considered. When processing different IDOC-types (e.g. store order), enter any follow-on documents separately (such as SD order line-items in SD-SLS).</p>
MM PUR	<p>Request or instruction from a purchasing organization to a vendor (external supplier) or a plant to deliver a certain quantity of material or to perform certain services. Line items: A purchase order consists of a number of items, each of which will have a procurement type defined. Comment: We assume a purchase order has two text lines on average. 30% of the purchase orders are assigned to an account. 10% of the line items have delivery costs. There is one goods receipt line item per purchase order line item. There is one invoice line item per purchase order line item.</p>
MM IM Materials Movement	<p>Physical or logical movement of materials which leads to a change in material stock levels or results in direct consumption of the material. A goods movement can be a goods receipt, goods issue, or a transfer posting of materials. Please enter the number of all material movements that originate from any used component within the SAP system (e.g. LE - SHP Logistics Execution - Shipment) Line items: A goods movement consists of items containing the quantity and value of the given material. The materials to be actually placed in or removed from storage can be specified in each item as single units. Comment: No postings in the previous month. When processing different IDOC-types (e.g. store order), enter any follow-on documents separately (such as SD order line-items in SD-SLS).</p>
LE WM Stock Movement	<p>The business object transfer order is an instruction to move materials from a source storage bin to a destination storage bin within a warehouse complex at a specified point in time. Line items: A transfer order consists of items that contain the quantity of the material to be moved and specifies the source and destination storage bins.</p>
LE-SHP Delivery Notes & Goods Issue	<p>Number of delivery notes and goods issue. Line items: Average number of line items for delivery notes and goods issue.</p>
QM Inspections	<p>Tasks for determining the actual status of a technical system (for example, a machine) or a material. Inspection Characteristics: The basis on which an inspection is performed. Comment: We assume that one inspection with several inspection characteristics is carried out per inspection lot. On average, there is one single value recording per inspection characteristic.</p>
PM Orders	<p>Orders in the sense of maintenance orders. Requirement to execute a maintenance task on a maintenance object for a specific deadline. In addition, the maintenance order is a means of documenting maintenance work. In particular, maintenance orders are used to</p> <ul style="list-style-type: none"> <li>- plan maintenance tasks in a targeted manner</li> <li>- monitor the execution of maintenance tasks</li> <li>- enter and settle the costs incurred by maintenance tasks</li> </ul> <p>Components: A maintenance order contains operations that describe the individual work steps. If greater detail is required, operations can be subdivided into sub-operations. Enter the average number of components per operation.</p>
CS Orders	<p>A request for a service activity to be performed to a maintenance object at a customer company on a particular date. In addition, a service order is used to document service and customer service activities. Components: In an order, components are usually materials assigned to an operation. Enter the average number of components per order. Comment: We assume that one operation is valid for five components.</p>
PP Planned Orders	<p>Request created in a plant's planning run which triggers the procurement of a plant material for a certain quantity for a specific date.</p>
PPP SFC Production Orders	<p>Manufacturing order used for discrete manufacturing. A production order contains operation sequences. An operation describes how to carry out a work step. By combining operations into operation sequences, you can create parallel or alternative processes. Components: The following graph gives an example of how to determine the number of components by showing number of components of a multi-level BOM of a product F1. The finished product F1 contains a semi-finished product F2, which is also an in-house-product. Therefore the production orders for both products F1 and F2 must be considered for sizing. The size of the "number of components" is determined by the summation of all individual components on the first production layer (finished product and semi-finished product, respectively). The components used are either raw materials, for example F1Cx or F2Cx, or assemblies, such as F2 used in the production of</p>

	<p>F1. Phantom assemblies (P1 and P2) are only used to structure the bill of materials; they are not produced separately. The components of the phantom assemblies (P1Cx or P2Cx) must therefore be added to the components of the next higher level.</p> <p>Therefore, in this example we can determine the following number of components:  The production orders for the finished product F1 have seven components (F1C1, F1C2, F1C3, P1, P1C1, P1C2, and F2). The phantom assembly P1 should be counted as a real component.  The production orders for the assembly F2 have six components (F2C1, F2C2, P2, P2C1, P2C2, and P2C3).</p> <p>Note  You must enter the respective materials movements (goods receipt for the header material and goods movement for the used components) in the line for MM-IM. This is not counted automatically. If you print numerous production documents, enter their number in the line for "BC Printed Documents". The columns for the display of objects and the changes of objects should be filled, too. If, for example, you create a production order in one transaction and release it afterwards, please enter "100" for "object changes" because every order (i.e., 100% of the orders) is changed by being released. If you display the production order, then you must fill in the field for object display. Also, every confirmation to a production order must be considered for the field "object change". Order settlements are not considered and have to be considered by CO.</p> <p>Comment: We assume:  10 status items per production order  3 status items per component  1 sequence for every 10 components  1 operation for every 5 components  3 status items per operation</p>
PS Projects	<p>A complex structure of tasks within a controlling area which is used to control and monitor the schedule, resources, capacities, cost, revenues, and funds availability.</p> <p>WBS-Elements: An individual structural element in the work breakdown structure (WBS) representing the hierarchical organization of a project. It describes either a concrete task or a partial one that can be further subdivided.</p> <p>Networks: A network contains instructions on how to carry out activities in a specific way, in a specific order and in a specific time period.</p> <p>Activities: Average number of activities per network. An activity is a task in a network which has a defined start and finish. An activity can be broken down into activity elements. There are three categories of activities in the Project System:  internal activities  external activities  general costs activities</p> <p>Comment: For calculation we assume:  5 status items per project.  5 distribution rules per project.  3 status items per WBS element  3 distribution items per WBS element  3 allocations per WBS element</p>
PT Time Data	<p>Employee data that is relevant in some way to time.</p> <p>Examples:  sickness period; working time; leave; overtime</p>
BC Printed Documents	<p>Data storage medium containing information of a specific type.</p> <p>Comment: We assume we assume that a page is always completely filled in and that the document is always completely printed.  Enter the number of printed pages per year.</p>
BWP Business Workplace	<p>The Business Workplace provides a standard working environment in which every SAP user can carry out their share of the business and communication processes in the enterprise. There, they receive all the work items that are assigned to them in the course of SAP Business Workflow and process the documents that were sent to them from people or from SAP applications. This can include the following actions:  Processing work items  Receiving and sending mails  Administrating documents and work processes  Distributing and processing companywide and group internal information</p> <p>Comment: The number of sub components for BWP means the number of lines per item. Enter the number of recipients for external and internal mails in the field for sub components.</p>

## Quantity Structure based input II

FI AA assets depreciation	Reduction of the asset book value due to decline in economic usefulness, or due to legal requirements for taxes.
CO-OM-OPA Order settlement & Overhead rates	Complete or partial crediting of an order. The costs which have accrued to an order are debited to one or several allocations. Overhead rates: Rate applied to the direct costs to allocate the indirect costs. Can be a flat rate or a percentage.
CO-OM Assessment & Overhead rates	Assessment is a method of internal cost allocation in which you transfer the costs of a sender cost center to receiver CO objects (orders, other cost centers, and so on) under an assessment cost element. The system supports both the hierarchical method (where the user determines the assessment sequence) and the iterative method (where the system determines the sequence via iteration). Estimation of line items for assessment, distribution and periodic reposting: The segments of all cycles have to be added. For each segment the line items (sender (S) - receiver (R) relationship) may be calculated: assessment S-R = number of senders * number of receivers distribution S-R = number of senders * number of receivers * average number of cost elements used by the sender periodic reposting (equal to distribution) Indirect activity allocation S-R = number of senders * number of receivers * average number of activities used by the sender Example You have defined a cycle which consists of the segments a and B, each segment consists of 5 senders. Two receivers and each sender of segment A have received postings with three different cost elements (CE). The 5 senders of segment B have received postings with four different cost elements. Therefore the cycle has $30 + 40 = 70$ S-R relations altogether. Segment A: $5 (S) * 3 (CE) * 2 (R) = 30$ S-R relationships Segment B: $5 (S) * 4 (CE) * 2 (R) = 40$ S-R relationships
PT Time evaluation	Time evaluation is a program which is generated daily to calculate attendance and absence times on the basis of attendance and absence data, time types (flextime balance, productive hours) and wage types (bonuses for night, Sunday and public holiday work). Assumption: Time Evaluation is processed every working day.
PA Employee & Number of employees	The business object Employee is a person who contributes or has contributed to the creation of goods and services within the enterprise. As a rule, this occurs on the basis of a work contract or a contract for services. Comment: Financial postings resulting from loan postings have to be treated separately. For the number of employees we assume that the payroll is executed once a month. Other periods should be scaled through the input data (Example: 50,000 employees should be calculated semi-monthly in 4 hours -> Input: 100,000 employees and 8 hours)
PY Payroll	The average Number of retro calculations per employee per payroll Example: Input "2" for two retro calculation means three periods in total. Comment: Always enter information for both, Employee and Payroll.
MM Period Closer	Program that is run at the start of every new period. It ensures the following: Certain data is updated in the correct period Goods movements are always posted to the correct period The values in what was formerly the current period are copied to the corresponding fields for the previous period
PP MRP	Material Requirements Planning (MRP) Generic term for procedures in materials planning which take into account and plan every future requirement during the creation of order proposals (independent requirements, dependent requirements, and so on). Comment: The MRP run is conducted every day with the processing key "Net change" for the total planning horizon. The number of components implicitly determines the scope of the routing. With an increasing number of components, the number of operations in the routing rise. The runtime and CPU consumption directly depend on the number of reservations in the system. The MRP run can be parallized without end, dependencies on dataconstellation are not considered.
Net change planning	Materials planning run where only those materials are planned which have undergone a change relevant to materials planning since the last planning run.
Planned orders per day	A planned order is a request created in the planning run for a plant to trigger the procurement of a plant material for a certain quantity for a specific date. Enter the number of planned orders created per day and when the batch jobs run.
Planning Horizon	The planning horizon is the period which is set for the "net change planning in the planning horizon." For this type of net change planning only those materials are planned in the planning run which have a change related to materials planning within the period (in work days). Comment: The length of the planning horizon should at least include the following:

	Period in which customer orders are being created Delivery times Complete material processing time
Reorder point planning	Special procedure in materials planning. If the reorder point is greater than warehouse stock, an order proposal is created by materials planning. A distinction is made between: automatic reorder point planning manual reorder point planning
Lead time scheduling	Calculates the exact production dates and creates capacity requirements. Lead time scheduling via routing: In this case, it calculates the start and finish dates and times of the individual operations.

## SAP BW Business Information Warehouse Sizing Input

BW users	<p><b>Definition</b> In BW, we distinguish roughly between user types according to their frequency of activity and the reporting they will normally do.</p> <table border="1"> <thead> <tr> <th>User Type</th> <th>Navigation Steps per Hour</th> <th>This user will predominantly ...</th> </tr> </thead> <tbody> <tr> <td>Information Consumer</td> <td>1</td> <td>... view predefined and static reports</td> </tr> <tr> <td>Executive</td> <td>11</td> <td>... navigate within reports, do slicing and dicing, but usually hit aggregates</td> </tr> <tr> <td>Power</td> <td>33 and more</td> <td>... run ad-hoc queries with a high probability of full table scans</td> </tr> </tbody> </table> <p>A navigation step includes drilling down in the reports and corresponds to nine dialog steps in the SD benchmark. If you don't know the user distribution, a typical ratio in the BW environment is 71%: 27%: 3% (normal : advanced : power).</p>	User Type	Navigation Steps per Hour	This user will predominantly ...	Information Consumer	1	... view predefined and static reports	Executive	11	... navigate within reports, do slicing and dicing, but usually hit aggregates	Power	33 and more	... run ad-hoc queries with a high probability of full table scans								
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Query Types	<p><b>Definition</b> Collection of a selection of characteristics and key figures (InfoObjects) for the analysis of the data of an InfoProvider. A query always refers exactly to one InfoProvider, whereas you can define as many queries as you like for each InfoProvider.</p> <p>For sizing purposes we distinguish between three query types which are defined by the load they create in the system.</p> <ul style="list-style-type: none"> <li>Report Viewing: Predefined, static, reports using optimal aggregates</li> <li>OLAP Analysis: Slicing and dicing, navigating in reports, using various aggregates</li> <li>Data Exploration: Data mining, that is ad-hoc reports with unpredictable navigation paths, access of detail data, full table scans</li> </ul> <p>Any user can do any type of query. However, experience shows a certain activity pattern, as you can see in the table below.</p> <table border="1"> <thead> <tr> <th>Query Type</th> <th>Report Viewing</th> <th>OLAP Analysis</th> <th>Data Exploration</th> <th>Total Percent</th> </tr> </thead> <tbody> <tr> <td>Information Consumer</td> <td>80%</td> <td>20%</td> <td>0%</td> <td>100%</td> </tr> <tr> <td>Executive</td> <td>50%</td> <td>50%</td> <td>0%</td> <td>100%</td> </tr> <tr> <td>Power</td> <td>0%</td> <td>0%</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table>	Query Type	Report Viewing	OLAP Analysis	Data Exploration	Total Percent	Information Consumer	80%	20%	0%	100%	Executive	50%	50%	0%	100%	Power	0%	0%	100%	100%
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Info-Cube	<p><b>Definition</b> The central objects upon which reports and analyses in BW are based, are called InfoCubes. An InfoCube describes (from a reporting point of view) a self-contained dataset, for example, of a business-orientated area. An InfoCube has a particular type:</p> <ul style="list-style-type: none"> <li>BasicCube which is a collection of relational tables arranged according to the star schema: A large fact table in the center, surrounded by several dimension tables.</li> <li>MultiCube which is based on the basic cube. It combines data from several BasicCubes/RemoteCubes, and brings it together into one context. The MultiCube itself does not contain any data; its data comes exclusively from the BasicCubes it is based on.</li> <li>RemoteCube to carry out reporting using data in external systems without having to physically store transaction data in BW.</li> </ul> <p>Only BasicCubes physically contain data on the database. MultiCubes and RemoteCubes simply display logical views of a dataset. The InfoCube type is not important, as far as reporting is concerned. A query definition always refers to one InfoCube. The difference between the InfoCube types becomes important at the point when you select data for the query.</p>																				

InfoCube types: From the list below you can choose additional InfoCubes, just take the information and fill it in the questionnaire.

Long Text	Short Name	Cube name	Dimensions	Key Figures	Length
Aerospace & Defense	A&D	0AD_C01	6	2	94
Apparel and Footwear	AFS	0AFMM_C01	8	48	896
Automotive		0AUPPC_3	12	11	307
Business Planning and Simulation		0SEM_C09	5	14	288
Category Management		0CM_C07	7	34	648
Consumer Products Industry	CP	0CP_PURC1	8	52	964
Distribution Channel-Specific A		0CRM_CTI2	3	16	302
E-Analytics		0WEB_C01	12	5	205
External Market Data		0DB_MC01	9	5	175
Financials Management & Control		0FITV_C02	12	13	341
Healthcare		0HC_C01	9	16	362
Insurance		0IS_CS_C1	9	8	226
Inventory Management		0COPC_C04	7	6	172
Investment Management		0IMFA_C02	7	3	121
Marketing		0CRM_MC05	12	43	851
Marketplace		0MA_OP_C1	9	13	311
Media Enterprises		0MEMAMC04	11	16	382
Mobile Sales	MSA	0MSA_C05	8	6	182
Oil & Gas	Oil & Gas	0OI_SSC01	9	16	362
Personnel Management		0PACM_C01	10	17	389
Point of sale	POS	0RT_C06	9	33	651
Retail - Logistics		0RT_C41	7	183	3181
Sales and Distribution Analyses		0CSAL_C09	12	29	613
Service		0CRM_PRI	14	47	939
Strategic Enterprise Management	SEM	0SEMPA_C2	13	68	1286
Strategic Enterprise Management		0SEM_MC01	6	9	213
Traffic Analysis		0MA_C02	15	21	507
Treasury	TR	0TRCM_MC1	6	2	94
Utility Company		0UCSA_C01	12	20	460

**CRM Customer Relationship Management**

Activity Management	<p>Within Activity Management, your employees can:</p> <ul style="list-style-type: none"> <li>Create business activities to document any interaction they have with customers</li> <li>Create tasks to manage their own workload</li> <li>Manage their work in the Application Workplace</li> <li>View appointments and activities in the calendar</li> <li>Access the fact sheet for valuable information about business partners</li> <li>Access the Business Workplace for using workflow items</li> </ul> <p>The two main elements in Activity Management are the application workplace and the calendar. Each provides a different view of your workload and you can switch between them. The calendar displays all your appointments in a daily, weekly, or monthly overview. The inbox, on the other hand, provides you with a personal workplace or file manager, where all your activities, whether they have been given fixed appointments or not, are clearly sorted into different folders.</p>
Opportunity Management	<p>The Opportunity describes the sales prospects, their requested products and services, the sales prospect's budget, the potential sales volume and an estimated sales probability. This information becomes concrete in the course of the sales cycle, and can be displayed and evaluated in the system.</p> <p>Opportunity Management provides the framework for presenting sales projects from the very start, and tracking their progress. In this way, it provides the basis for an analysis and optimization of your enterprise.</p> <p>Users in Opportunity Management can use the following functions:</p> <ul style="list-style-type: none"> <li>• Presentation of the Sales Cycle</li> <li>• Reason for Status</li> <li>• Working With Products</li> <li>• Management of Attachments</li> <li>• Transferring Data for Sales Volume Forecast</li> <li>• Classification of Opportunities</li> <li>• Texts in Opportunities</li> <li>• Opportunities - Fast Change</li> </ul>
Customer Orders	<p>In CRM, customer orders can be created in different ways, for example by a telesales agent in the Call Center or by customers via the Internet.</p>
Customer Interaction Center	<p>The Customer Interaction Center (CIC) is a key technology of Customer Relationship Management with mySAP.com. It is designed as a multi-channel, blended business process interaction center. To empower call centers to provide the highest level of customer service. It provides robust technology for contact center operations. It tightly integrates a highly customizable and full-featured front office with your back-office as well as your entire range of customer-centric processes. The customer Interaction Center is the common state-of-the-art technology for any business transactions via phone, email, letter or face to face. It's used in the following CRM Business Scenarios: Service Interaction Center, Telesales and Telemarketing. Highlights of CIC include:</p> <ul style="list-style-type: none"> <li>Processing inbound and outbound telephone calls with customers and other business partners using Computer Telephony Integration (CTI) technology as middleware.</li> <li>An Email Office system for processing incoming and outgoing emails. Also included are Planned Activities for the agent to execute.</li> <li>An Interactive Intelligent Agent (IIA) for problem analysis and Interactive Solution Search along with Frequently Asked Questions.</li> <li>The IIA Intelligent Agent is an easy to use tool that provides a wide range of users access to solutions from various knowledge bases. For more information, see Interactive Intelligent Agent.</li> <li>A comprehensive Interaction History log to provide one view of a customer. This enables agents to view planned and historical activities along with sales and service orders.</li> <li>Interactive Scripting to guide an agent through a telesales, outbound campaign or technical support interaction.</li> </ul>
Internet Sales	<p>This component allows electronic business activities to take place between companies and consumers as well as only between companies. Using SAP Internet Sales, manufacturers, shippers, wholesalers, and retailers can sell their products directly via the World Wide Web. The following components are contained in CRM Internet Sales:</p> <ul style="list-style-type: none"> <li>• Business-to-Consumer (B2C) Internet Sales</li> <li>• Business-to-Business (B2B) Internet Sales</li> <li>• Business-to-Reseller (B2R) Internet Sales</li> </ul>
Internet Sales Users Catalog browsing / Filling Shopping Cart	<p><b>Definition</b> In Internet Sales, users can be split into roughly two groups:</p> <ul style="list-style-type: none"> <li>• The vast majority of users will browse through the catalog offerings to gather information about products. They will not fill the shopping basket or order</li> </ul>

& Ordering	<p>products. Enter the number of users who will only navigate through the offerings.</p> <ul style="list-style-type: none"> <li>• A smaller number of Internet Sales users will actually fill the shopping cart and proceed to purchase the goods. How many users these will actually be depends strongly on the scenario used (B2B or B2C). In a B2B scenario, more users will belong to this group than in a B2C scenario.</li> </ul> <p>Note that we ask for absolute numbers, not percentages.</p>
Mobile Sales & Service	<p>Mobile Sales allows sales teams to work offline and to synchronize their data with the R/3 System. In this way, it supplies all the information required for optimal customer interaction. Such information can include real-time updates on:</p> <ul style="list-style-type: none"> <li>• Business partners</li> <li>• Contact persons</li> <li>• Products and services</li> <li>• Opportunities</li> <li>• Activities</li> </ul>
Mobile Sales & Service Parallel Logons	<p><b>Definition</b> In general, the Mobile Sales users will upload their data to the CRM system in a time frame of a few hours in the evening. Enter the highest number of users you expect to login within one hour.</p>

### APO Advanced Planner & Optimizer Sizing Input

Characteristic combinations	<p><b>Definition</b> A characteristic is a property that describes and differentiates objects, such as product, customer or location. There are numerous possibilities to combine characteristics, for example product and location. In APO only existing characteristic combinations are stored, not all possible combinations of existing characteristics. An example for a possible characteristic combination is product '4711', bought by customer '007' in location 'London'.</p> <p><b>Characteristic combinations for planning run</b> Number of characteristic combinations which are planned in mass processing. If you plan at aggregate level, enter the number of characteristic combinations at this level. This field is important for CPU sizing.</p>
Keyfigure	<p><b>Definition</b> A criterion for evaluating past performance or forecasting future performance. A key figure is a value or a quantity; for example, sales revenue, sales quantity or production quantity.</p> <p><b>Key figures in liveCache</b> The number of key figures (in %) that reside in the liveCache. It is faster to access key figures in the liveCache than accessing them in the InfoCube. We recommend you save all key figures in the planning horizon in the liveCache. This, however, increases memory consumption of the liveCache.</p>
Planning version	<p><b>Definition</b> A Demand Planning version is a scenario of data used to create a unique demand forecast. The data for each version is stored in the InfoCube. So, an InfoCube that contains two versions, each having the same data, requires twice the disk space than if the InfoCube contained one version of data. Therefore, the sizing estimate requires a count of planning versions used by all InfoCubes used by Demand Planning. The calculation for disk space assumes that each version contains the same amount of data per version</p>
Number of periods in planning horizon	<p><b>Definition</b> Total number of periods in planning horizon is a count of future time buckets used in planning. You can store planning periods in weeks, months, quarter, year or posting period. We do not recommend daily periods, even though they are possible in theory.</p> <p>If you choose a combination of different periods, enter the data broken down to the smallest unit. For example, if you have a planning horizon of 2 years and the data of the first three months are to be stored in weeks whereas afterwards the data are to be stored in months, you enter 104 (weeks).</p>
Number of periods in historical horizon	<p><b>Definition</b> Total number of periods in historical horizon is a count of the historic time buckets to plan future demand. Note that a higher number of time buckets requires more disk space and CPU processing time.</p>
Retention period for data records in InfoCube	<p><b>Definition</b> In the course of time the planning horizon and the historical horizon move on. Older time buckets that do not belong to the defined horizon anymore, may reside in the InfoCube for a specific time frame. This field influences disk sizing of the InfoCube. The total number of periods for disk sizing is calculated as follows: periods in planning horizon + periods in historical horizon + additional retention period. The greater the retention periods, the more disk space is required to store the accumulation of data.</p>
Duration of the planning run	<p><b>Definition</b> The duration of the planning run depends on the demands for planning and operating. The less time you allocate, the more CPUs you'll need for the planning run. The CPU requirements are inversely proportional to the processing time.</p>
Resources	<p><b>Definition</b> A machine, person, facility, warehouse, means of transportation or other asset with a limited capacity that fulfills a particular function in the supply chain. In APO, the following resources can be modeled:</p> <p>Resources whose capacity is determined by working time data. The capacity of these resources is continuously available during working hours. There are single-activity resources, on which only one activity can be processed at any one time, and multi-activity resources, on which several activities can be processed simultaneously. Single-activity resources and multi-activity resources are used for scheduling in the APO components Capable-to-Match (CTM) and Production Planning and Detailed Scheduling</p>



	(PP/DS), in which production dates of orders and operations are scheduled in seconds. Bucket resources, whose capacities are defined by quantities (for example, transport or warehouse capacities) or by daily rates (for example, production rates). Bucket resources are used for scheduling in Supply Network Planning (SNP). The most detailed scheduling that can be done is on a daily basis.
Warehouse Stocks	<b>Definition</b> The number of warehouse stocks is a count of the detailed stock locations used in planning. For each facility, you have to decide whether sub locations will be included in the planning process. These can be as detailed as shelf and bin locations in a warehouse. Also, batches can be separated in product planning. If either the sub location or the batch value is not used for planning then that category is set to 1. Multiply the number of sub locations by the number of batches for each facility. Sum the totals for the facilities used in active model. If sub locations and batches are not used in planning, the total is the number facilities in the active
Location Products	<b>Definition</b> In the Quick Sizer, there are two fields to enter location products, as master data and in Supply Network Planning If all products can be stored in all locations, just add the number of products per location. For example, every customer location can only store finished goods. However, every distribution center can store finished goods as well as components, whereas every plant can only produce and store a limited number of finished goods and products. In SNP it is possible to store individual key figures, such as requirements or receipts cumulated in time series. If a goods receipt or goods issue is changed the time series position for that day is written to the database. A time series position describes the cumulated amount of a day in a time series. Combinations use characteristics to forecast the dependent demand. This number is a percentage of the number of warehouse stocks determined in the question above.
Key Figures in Time Series	<b>Definition</b> Number of cumulated key figures such as requirements or receipts stored in time series.
Time Buckets in Time Series	<b>Definition</b> Number of periods that are considered in the SNP time buckets. With the help of time buckets you can determine that for long term planning secondary requirements are collected on a monthly basis, for a short term planning, however, the requirements are collected on a daily basis. For example, if you have a planning horizon of 2 years and the data of the first three months are to be stored in weeks whereas afterwards the data are to be stored in months, you enter 104 (weeks).
Time Buckets	<b>Definition</b> Number of time periods in the forecast order. This is the number of periods in the bucket profile used to release data from Demand Planning to Supply Network Planning. For example, if you determine that the planning is done on a daily basis for the next 30 days, then, in weekly time buckets for the next 12 weeks, and then in monthly buckets for the next 20 months, you enter 62 time periods altogether (30+12+20).
Planned Orders and Requisitions (Sales orders, purchase orders, planned orders)	<b>Definition</b> Planning does not consider processed orders because they are deleted by the liveCache. However, these orders remain in SAP R/3 until they are fully processed (billing). Therefore there are usually more orders in SAP R/3 than in APO. <b>Forecast orders</b> For every product location a forecast order is created. In general the forecast orders are created when the prognosis is transferred from Demand Planning to Supply Network Planning.
Planned orders with SNP-PPMs	<b>Definition</b> Number of planned orders that are created in SNP. Usually, SNP uses large scale production process models (PPMs) which contain few components and even less operations or activities. The more orders there are, the more memory is required for the liveCache. Enter how many components of the Bill-Of-Material are usually combined per PPM. Enter the average number of operations per PPM, and the average number of concluded activities there are per operation. To each activity, a different activity type is allocated, for example setup, process, tear down or maintenance.
Planned orders or manufacturing orders with PP-PPMs	<b>Definition</b> Number of planned orders or production orders that are created in roduction Planning - Detailed Scheduling (PP-DS). Usually, PP-DS uses finely tuned production process models (PPMs) which contain more components and more operations or activities. The more orders there are, the more memory is required for the liveCache. Enter how many components of the Bill-Of-Material are usually combined per PPM. Enter the average number of operations per PPM, and the average number of concluded activities there are per operation. To each activity, a different activity type is allocated, for example setup, process, tear down or maintenance.
Product locations in heuristic planning run	<b>Definition</b> Number of product location that are planned in an SNP heuristic planning run. This field together with the time period for execution influences memory consumption of the liveCache.
Planning versions (incl. active version)	<b>Definition</b> The number of planning versions refers to the number of planning versions of the active and simulated models. We assume that every version uses the same number of transactional data for planning. A model with two versions therefore requires double the liveCache memory than a model with one variant would.
Rule-based ATP-Requests	<b>Definition</b> Number of rule-based available-to-promise checks per hour. This check in an iterative process, every check defines the next check according to the rules in the system. <b>Example</b> Rule I Search for an alternative location. If none is found, search for an alternative requirements method.

	<p>Regel II</p> <p>Search for an alternative product. If none is found, Search for an alternative product in an alternative location. If none is found, Search for an alternative requirements method.</p>
CTP Requests	<p><b>Definition</b> Number of Capable-to-Promise (CTP) checks per hour. If a required product is not available in the required quantities, in Production Planning and Detailed Scheduling, you can create planned orders or purchase requisitions for the missing products with the help of CTP</p>
Orders transferred to and from SAP R/3 to APO	<p><b>Definition</b> This refers to the number of orders that are transferred from R/3 to APO and vice versa. This field is particularly important for CPU, it has no influence on memory consumption of the liveCache.</p>
Orders generated Supply Network Planning	<p><b>Definition</b> The average number of orders by Supply Network Planning refers to all transactions generated from an Supply Network Planning run. These include production orders, transport orders, purchase requisitions, etc.</p>
Planning relevant orders	<p><b>Definition</b> The average number of planning relevant planned orders and manufacturing orders refers to all production orders that are planned and scheduled in PP/DS. The larger the number, the greater the Live Cache memory requirements. Also, orders that are confirmed by the R/3 system are no longer in the APO system. So, the number of planned and released production orders in APO may be smaller than the number of production orders in R/3.</p> <p>The average number of components per manufacturing order asks for a count of the bill of material components included in each production process model.</p> <p>The average number of operation steps per manufacturing order asks for the number operations, on average, in each Production Process Model.</p> <p>The average number or operations steps per operation. Each operation is composed of operation steps (activities). Activities include setup, tear down, production, and queue. Determine the average number of activities per operation used in APO planning.</p> <p>The average number of alternative resources per activity can be one or more, depending on the number of resources that can perform the same activity used to produce a product. (A resource can be a production line, a work center or any other manufacturing facility.)</p> <p>Determine the average number of parallel capacity requirements per operation step (activity). This can be one or more constraining resource in an operation. For example, this can be a work center and a specific tool or person, all required to perform a specific operation step.</p>
Supply Network Planning versions	<p><b>Definition</b> The average number of planning versions refers to the number of Supply Network Planning versions used by the active and simulation models. Each version is assumed to contain an equivalent amount of transaction data used for planning. So, a model with two versions will require twice the amount of Live Cache memory, as a model with one version. This is a sum of the versions used in APO divided by the number of models.</p>
Heuristic planning run	<p><b>Definition</b> The number of orders created by one heuristic planning run asks for a count of the new orders generated from a planning run. These orders represent a significant percentage of the amount of Live Cache memory required by the system.</p>
APO user sizing	<p><b>Definition</b> There is no APO user sizing as you know from other components. In APO, the user figures are only calculated as additional CPU load. Enter the number of users who work in the following planning scenarios:</p> <p>for interactive planning - /sapapo/sdp94 for interactive planning - /sapapo/snp94 for planning board - /sapapo/cdps0</p>
Supply Network Planning duration	<p><b>Definition</b> The Supply Network Planning duration of a planning run is the time needed to plan for the entire time horizon during nightly batch processing. The smaller this time (in hours), the more CPU processing capacity is required.</p>
Planning run	<p><b>Definition</b> The number of orders (such as transport orders and/or planned orders) that are being created during an SNP heuristic planning run. Enter also the planning run's time frame (Start/End).</p>

**SAP Utilities Sizing Input**

Business partners of the utility company	A business partner is a natural person, organization, group of natural persons, or group of organizations in which a company has a business interest. A business partner may be a person, organization, or group within a company, such as 'Mrs. Lisa Davies', 'Reproelectrical Products Inc.', or 'The tenants of 15 Charles St.'. Please enter the total number of business partners of the utility company.
Total number of contract accounts	A contract account is an account in which posting data for contracts or contract items are processed for which the same collection/payment agreements apply. Contract accounts are managed on an open item basis within contract accounts receivable/payable. In the case of utility companies, a contract is assigned to one contract account only. However, and depending on the contract account category, several contracts can be assigned to one contract account.
Total number of meters in the network	A meter is an instrument to measure the consumer-dependent resources of a rental unit (for example, electricity, water) as a value. Enter the total number of meters of the utility company
Total number of contracts	A contract is an agreement between a business partner and the utility company that applies to a single division. Please enter the total number of contracts (master data) of the utility company here.
Budget billings per year (0-12)	For the utility company, budget billing payments are down payments on the bill, which is charged later. We need to know how often you create budget billings for all your customers in one year. Comment: Typical values are: 0 (no budget billing) 1 (yearly) 2 (half yearly) 3 (quarterly) 6 (bimonthly) 12 (monthly) Note: You must choose one of the numbers between 0 and 12.
Billing cycles per year (1-12)	How often is the utility company billing all its business partners? Typical values here are: 1 (yearly billing) 2 (half yearly) 4 (quarterly) 6 (bimonthly) 12 (monthly) Note: You must choose one of the numbers between 1 and 12.
Billing lines and print lines	Billing lines and print lines do not contain any address lines, explanatory texts or sums and so on; these are contributed by the form. Print lines contain additional variable specifications (for example, tax) and are contributed by invoicing. To illustrate this, every line in the following highly simplified sample form have been marked at the end to indicate whether it is a form line, a billing line or a print line. In this case, the example form consists of one billing line and two print lines. Comment: Enter the average number of the respective lines on a single bill.
Retention period	Complete time period in which the data for an object are in the database until they are archived.
Customer overview	Enter how often you use the transaction "Customer Overview"
Customer contact	Enter how often you create customer contacts with the respective transaction.
Move-in and move-out	Move-in is the registration for utility service by the customer. This is different from moving into the residence, where the customer cancels the utility service.
No. of days for one complete batch cycle	The "complete batch cycle" here comprises all the required batch jobs for the complete processing of the business partners, that is meter reading order creation, meter reading order output, upload of meter reading results, billing, invoicing, bill printout etc. Comment: Enter the minimum number of days in which the complete batch cycle must be done for all business partners of the utility company once.
Batch processing interval	Specify when the the batch jobs run for the billing.