

Insight 2.7

Overview of Process:

This software will capture performance and dialog step statistics generated by your production SAP system. The captured statistics are written to the hard drive of the Windows PC dedicated for the collection process. When the collection process is complete, the statistics are reduced and compressed before being sent to IBM for analysis. A report will be sent to you detailing how your production system is utilized. The provided collection tool is designed to have a minimal impact on your production environment (see notes below).

It is recommended that you collect at least four days of statistics during a peak period to improve the quality and value of the report.

Usage Requirements:

A dedicated PC:

- IBM compatible with at least a 233 MHz Pentium processor and 32 MB of RAM.
- Installation of Windows 95, 98, Me, 2000, or NT 4.0 operating system.
- Disk space requirements: multiply the total expected number of dialog steps the Insight Collector will capture by 0.00025.
Example: The Insight Collector is expected to run for four days capturing one million dialog steps per day. $4,000,000 \times 0.00025 = 1,000\text{MB} = 1\text{GB}$ of disk space.
- For Windows 2000 and NT 4.0: Set the total virtual memory (physical memory + paging file) to a minimum of 128MB.
- PC must be on LAN with direct TCP/IP access to all production servers (except for a dedicated database server).
- The TCP/IP address of all server short host names (as seen in SM51) must be resolved by either "hosts" file entries, or DNS with a consistent, fully qualified domain. In an SP environment, short host names may require an alias in the PC's hosts file to resolve the switch host names over the client token-ring or ethernet network. Note: do not specify a domain in the SAP logon parameters.

Example alias entry in the PC's hosts file:

#IP address	ethernet	switch
#	hostname	hostname
9.93.100.21	appsv1en	appsv1cs

- The PC and all server clocks must be synchronized to the minute.
- The PC must be powered on during the entire data collection process.
- Disable the PC's power management (suspend) during the collection process.

SAP R/3 system:

- **Insight** supports SAP releases 3.0D thru 4.6C.
- The SAP Operating System collector (saposcol) must be setup and running on all application servers in the target system.
- If the database is on a dedicated server (no SAP instance), saposcol and rfcscol must be installed and working. Also, an RFC destination (TCP/IP connection in SM59) must be configured to access the remote saposcol from the Central Instance. This RFC destination is entered when prompted with the Dedicated Database dialog box.
- SAP statistics recording must be enabled (profile parameter: stat/level = 1).
- A SAP user ID of type CPIC must be created and assigned a profile (e.g. Z:INSIGHT) with the following authorizations:

S_CPIC(S_CPIC_ALL),
S_DATASET(S_DATASET_AL),
S_RFC(S_RFC_ALL).
S_ADMI_FCD(S_SACHBEARB)
S_C_FUNCT(S_C_FUNCT_AL)

*** New Requirement ***

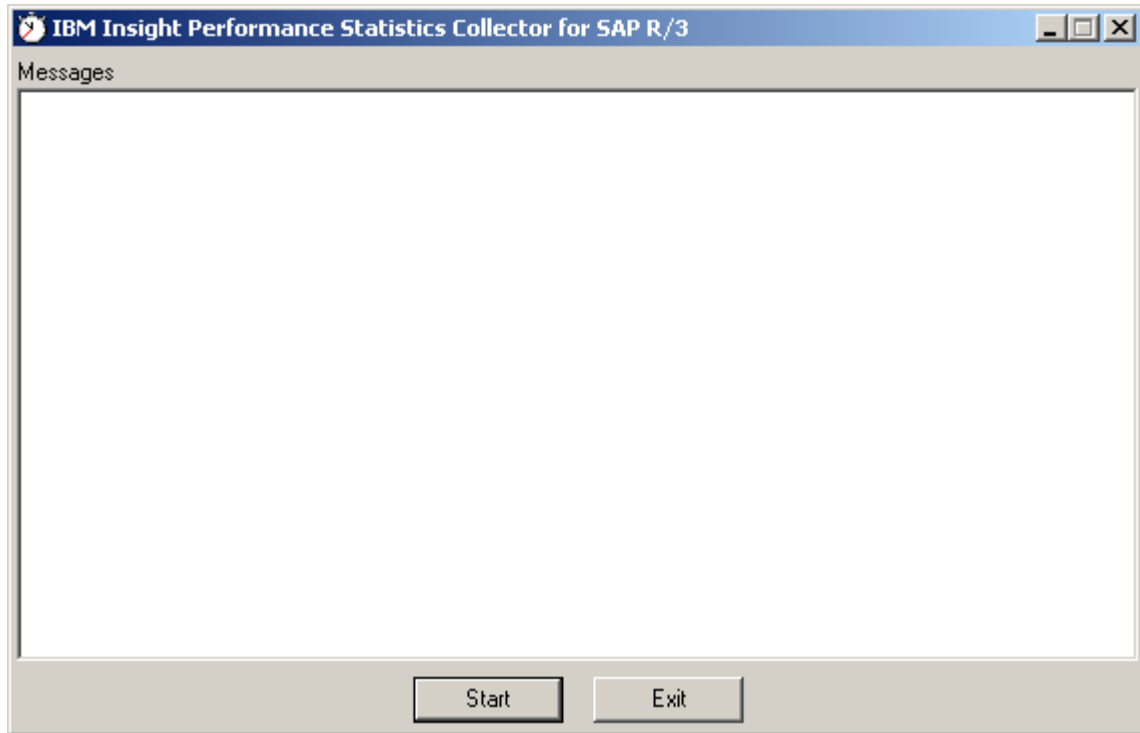
*** New Requirement ***

Installation Instructions:

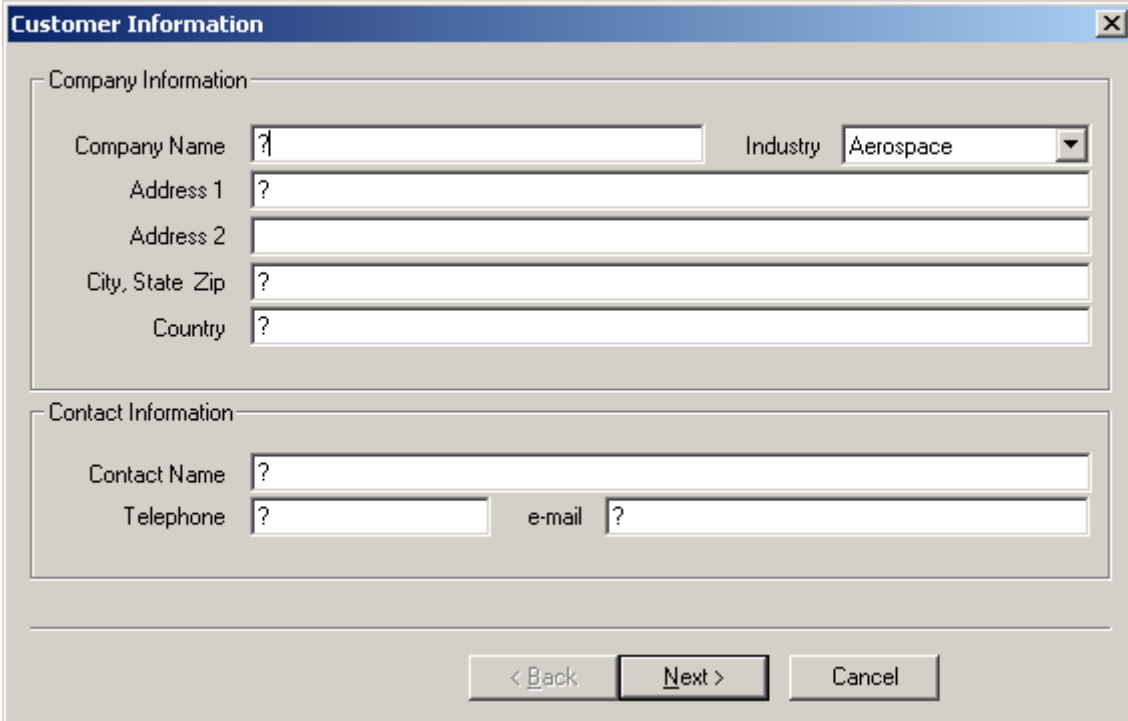
1. On the designated PC, copy the installation executable "SetupInsight.exe" to a temporary directory.
2. From Windows Explorer, double click on SetupInsight.exe to begin installation. Follow the installation process and reboot if necessary. *Insight* is designed to be uninstalled later.
3. Ping all SAP application server hosts from PC.
 - a. Using SAPGUI, logon to SAP and execute transaction "SM51".
 - b. The middle column, labeled "Host name", lists all of the short host names that must be directly accessible via TCP/IP from the PC.
 - c. While on the "SM51" screen, note the third column labeled "Type", and identify the host that is running "enque", this will be the name of the server that has the message server running (the host name of the message server will be needed for initial logon).
 - d. **If using DNS**, ping each host with name and domain from the PC command prompt (ex: C:\> ping appsrv01.yourcompany.com).
 - e. **If not using DNS**, the Windows "hosts" file must be maintained. For Windows 95 & 98, find the "hosts" file in the Windows directory of the PC. For Windows 2000 or NT 4.0, the file is located in the \winnt\system32\drivers\etc directory. If no "hosts" file is found, there is usually a sample "hosts.sam" file, which can be copied to "hosts" and then edited. Edit this file and verify that all the server names listed in SM51 and their corresponding TCP/IP addresses are in this file. From the PC command prompt, ping each short host name (ex: C:\> ping appsrv01).
4. Verify that the SAP operating system collector (saposcol) is running on each server (application and database). This can be done in the following manner.
 - a. Logon to SAP and execute transaction "SM51".
 - b. Highlight an application server and select "OS collector". For each application server, verify that some non-zero statistics are returned.
 - c. For a dedicated database server, execute transaction OS07. Select the appropriate SAPOSCOL destination. Verify that some non-zero statistics are returned.

Insight Collector Usage Instructions:

1. From the Windows Start menu, select Programs -> Insight -> Collector.
2. Press the “Start” button.



3. Complete your company's information. (question mark indicates required field)

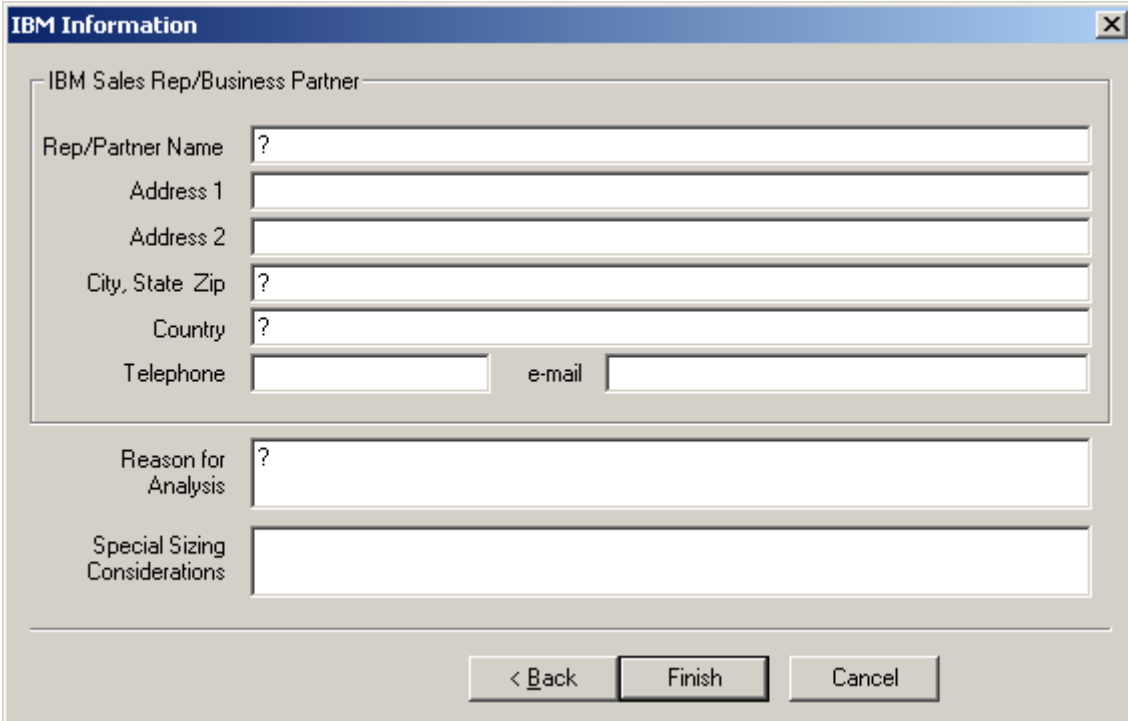


The 'Customer Information' dialog box contains two main sections: 'Company Information' and 'Contact Information'. The 'Company Information' section includes fields for Company Name, Address 1, Address 2, City, State Zip, and Country, all marked with a question mark. An 'Industry' dropdown menu is set to 'Aerospace'. The 'Contact Information' section includes fields for Contact Name, Telephone, and e-mail, all marked with a question mark. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Company Information	
Company Name	?
Address 1	?
Address 2	
City, State Zip	?
Country	?
Industry	Aerospace

Contact Information	
Contact Name	?
Telephone	?
e-mail	?

4. Complete your IBM Representative's information.

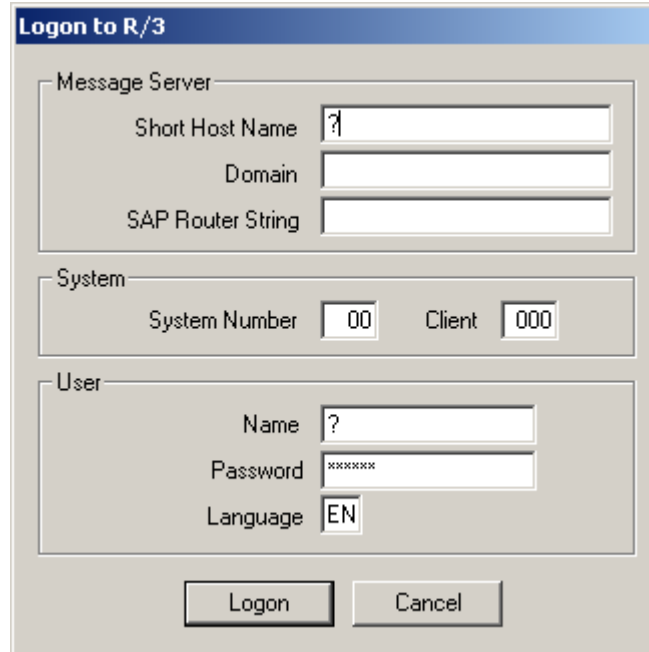


The 'IBM Information' dialog box contains two main sections: 'IBM Sales Rep/Business Partner' and 'Reason for Analysis'. The 'IBM Sales Rep/Business Partner' section includes fields for Rep/Partner Name, Address 1, Address 2, City, State Zip, Country, Telephone, and e-mail, all marked with a question mark. The 'Reason for Analysis' section includes a field for Reason for Analysis, marked with a question mark, and a field for Special Sizing Considerations. At the bottom, there are three buttons: '< Back', 'Finish', and 'Cancel'.

IBM Sales Rep/Business Partner	
Rep/Partner Name	?
Address 1	
Address 2	
City, State Zip	?
Country	?
Telephone	
e-mail	

Reason for Analysis	
Reason for Analysis	?
Special Sizing Considerations	

5. Logon to R/3.



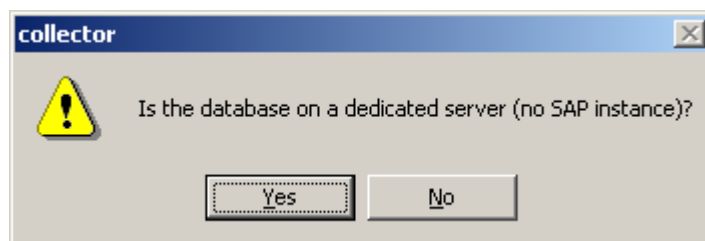
The image shows a Windows-style dialog box titled "Logon to R/3". It is divided into three sections: "Message Server", "System", and "User".

- Message Server:** Contains three input fields: "Short Host Name" (with a question mark), "Domain", and "SAP Router String".
- System:** Contains two input fields: "System Number" (with "00") and "Client" (with "000").
- User:** Contains three input fields: "Name" (with a question mark), "Password" (with "*****"), and "Language" (with "EN").

At the bottom of the dialog box are two buttons: "Logon" and "Cancel".

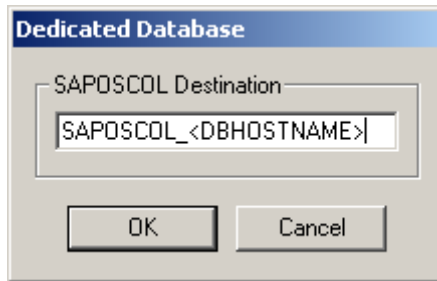
- Enter the message server short hostname (ex: appsrv01). Do not enter an IP address or a domain suffix.
- If using DNS, enter your company's domain (ex: yourcompany.com).
- If required, enter a SAP Router string.
- Enter the message server system number (ex: 00).
- Enter the client number where the CPIC user has been created.
- Enter the CPIC user name, password, and language (ex: SAPCPIC, ADMIN, EN).
- Press the "Logon" button.

After the SAP logon is complete, you may be prompted with the following message box:

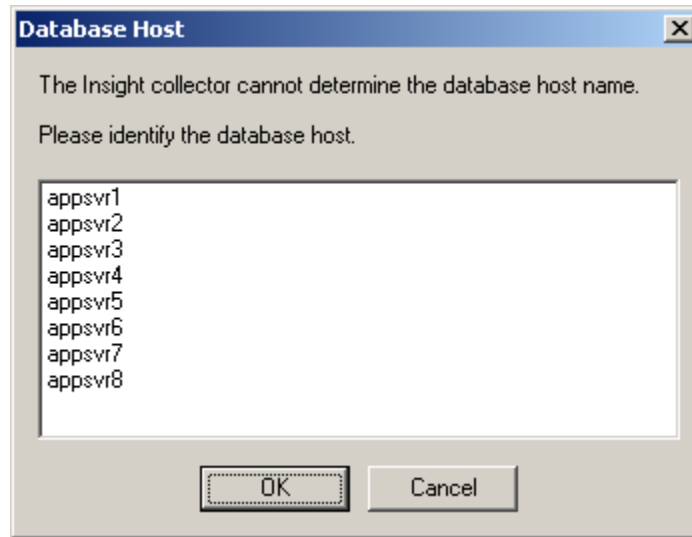


The image shows a Windows-style dialog box titled "collector". It features a yellow warning triangle icon on the left. The text in the center reads: "Is the database on a dedicated server (no SAP instance)?". At the bottom, there are two buttons: "Yes" and "No".

If the database is dedicated, meaning no R/3 instance running on the same host as the database, select "Yes". If the database server is not dedicated, possibly an HA or clustered configuration, press the "No" button.

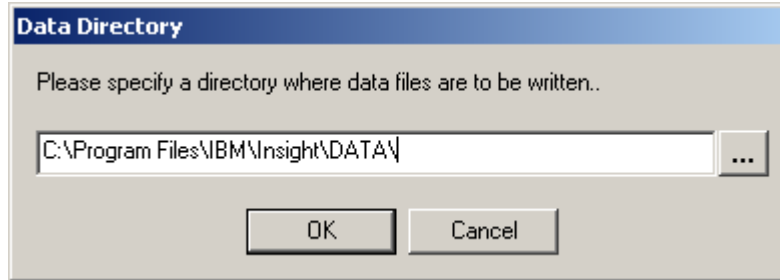


If you selected “Yes”, enter the SAPOSCOL destination defined in SM59 and press the “OK” button. The *Insight* Collector will attempt to connect to the remote destination.



If you selected “No”, please identify the host name of the database server.

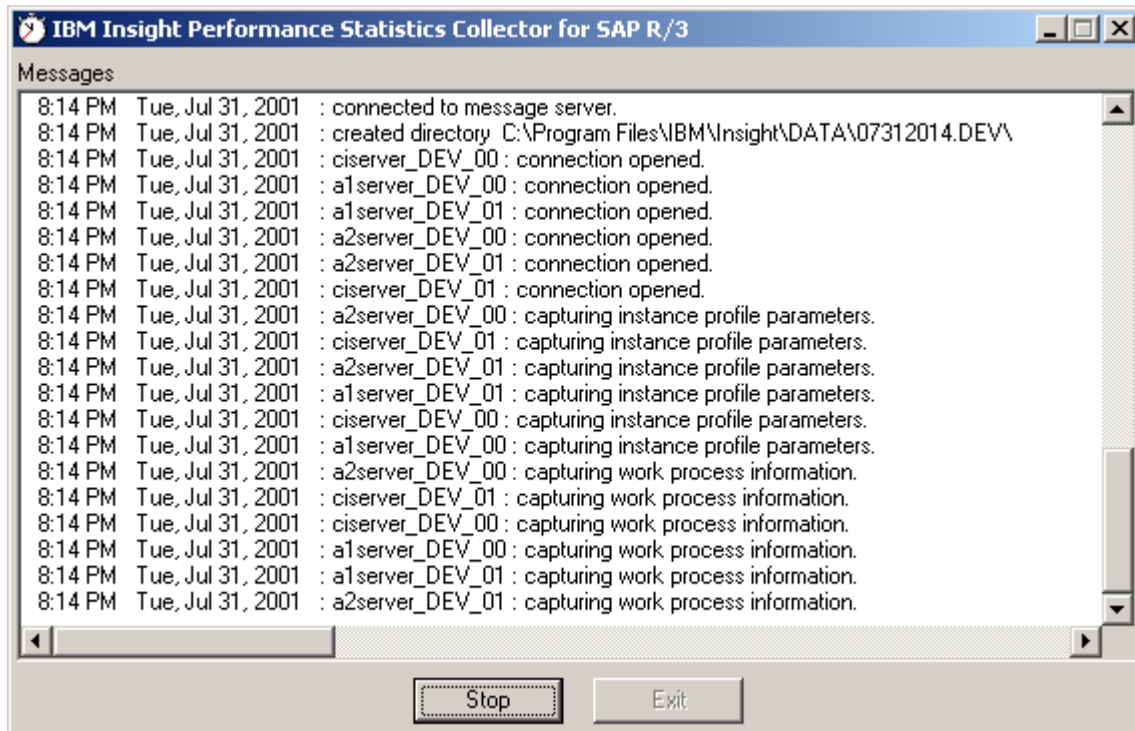
6. Specify where you want the data files written.



By default you are prompted with the *Insight* installation directory followed by the subdirectory \DATA\. If acceptable, press the "OK" button, otherwise specify a different directory (can be on a network drive). The *Insight* Collector will then create a session directory. The session directory is a subdirectory of the specified data directory with the following date/time naming convention:
MMDDYYYYHHMM.<SAPSID>

A unique session directory is created for each run of the Collector.

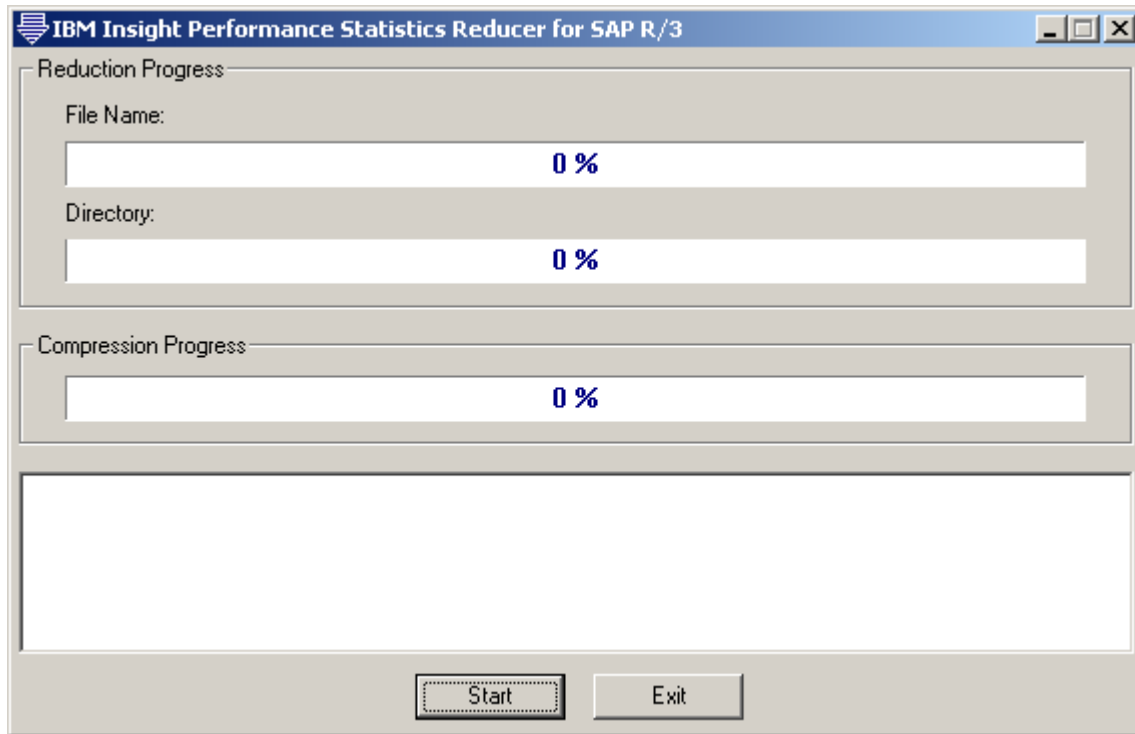
7. The Collector is now running and will capture performance statistics every minute. Status messages will scroll in the Collector's "Messages" window.



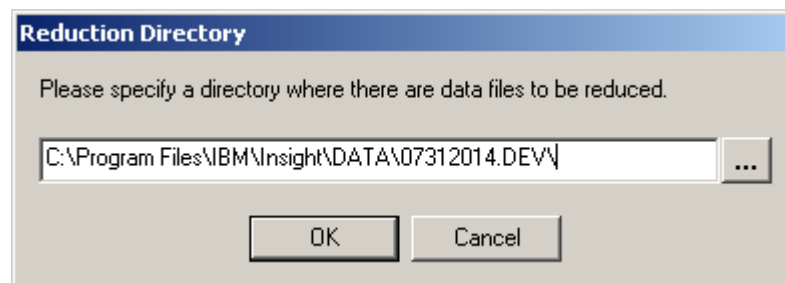
8. After four days of data collection, stop the *Insight* Collector by pressing the "Stop" button.
9. At this point you will be prompted to launch the *Insight* Reducer to begin data reduction. Choose "Yes" if you want to begin immediately, or "No" if you want to run the reduction processing at a later time or on a different PC.

Insight Reducer Usage Instructions:

1. From the Windows Start menu, select Programs -> Insight -> Reducer.
2. Press the “Start” button.

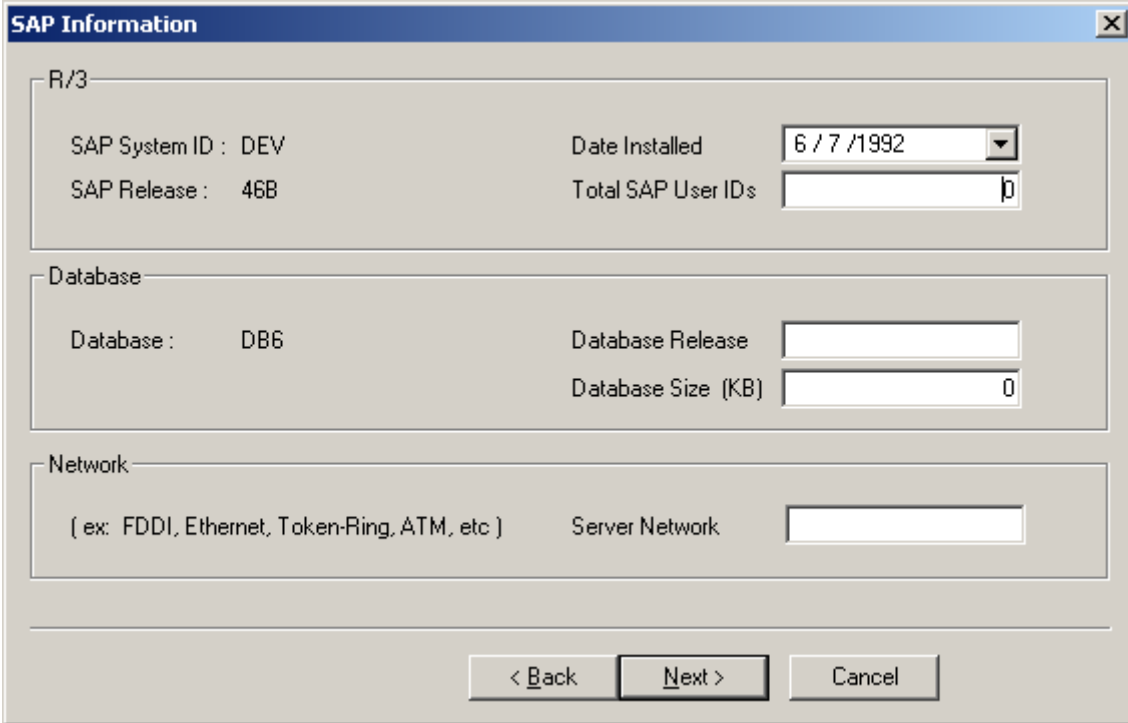


3. Specify the reduction directory. (the default is the last session directory)



4. Verify your company and IBM information.

5. Complete the SAP installation information.



The SAP Information dialog box is divided into three sections: R/3, Database, and Network. The R/3 section contains fields for SAP System ID (DEV), SAP Release (46B), Date Installed (6/7/1992), and Total SAP User IDs (0). The Database section contains fields for Database (DB6), Database Release, and Database Size (KB) (0). The Network section contains a field for Server Network. At the bottom are buttons for Back, Next, and Cancel.

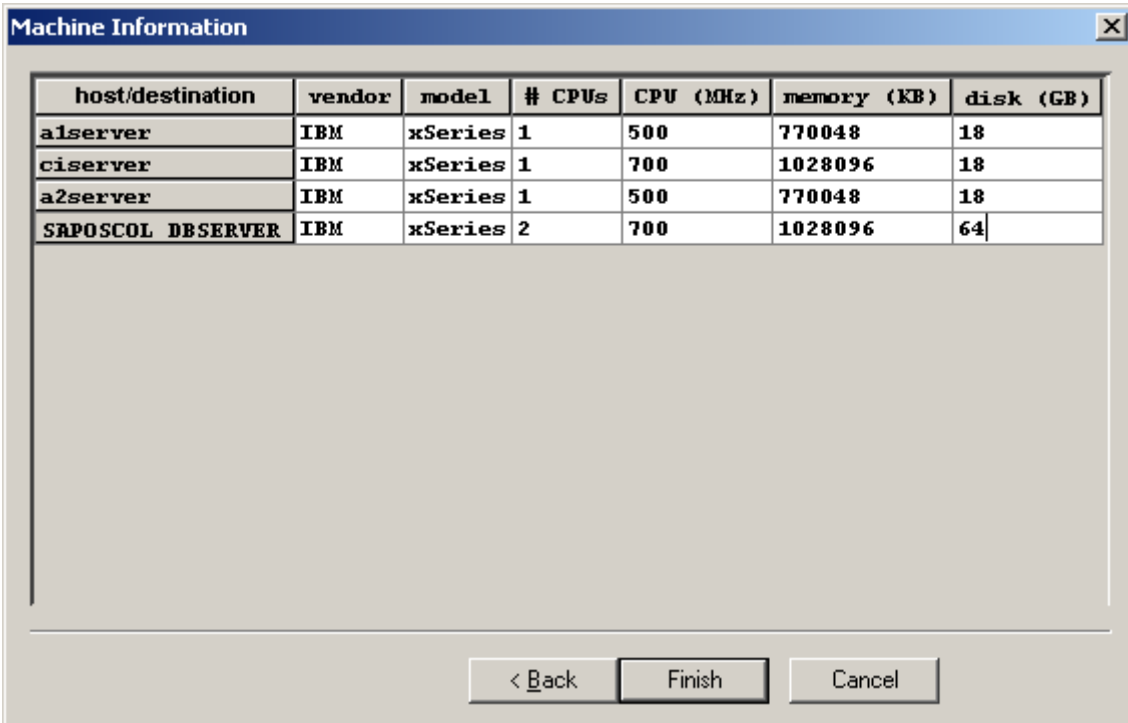
R/3	
SAP System ID :	DEV
SAP Release :	46B
Date Installed	6 / 7 / 1992
Total SAP User IDs	0

Database	
Database :	DB6
Database Release	
Database Size (KB)	0

Network	
(ex: FDDI, Ethernet, Token-Ring, ATM, etc)	Server Network

< Back Next > Cancel

6. Complete the host machine information.



The Machine Information dialog box displays a table with host machine details. The table has columns for host/destination, vendor, model, # CPUs, CPU (MHz), memory (KB), and disk (GB). The data rows are as follows:

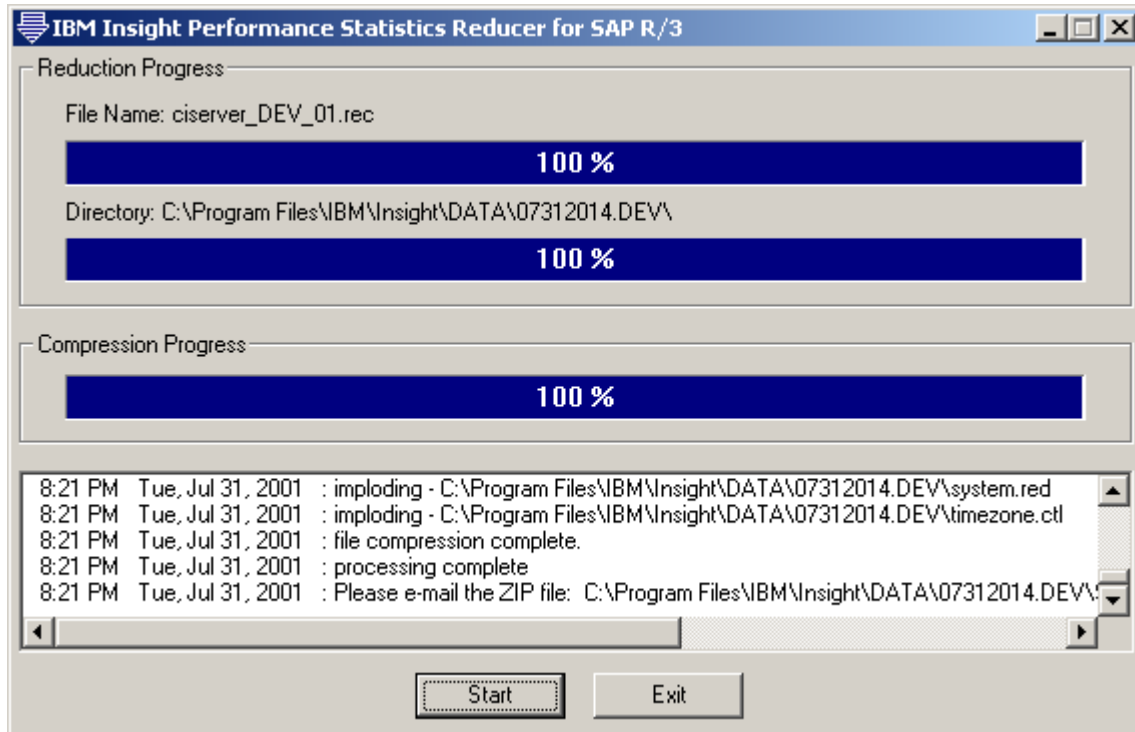
host/destination	vendor	model	# CPUs	CPU (MHz)	memory (KB)	disk (GB)
a1server	IBM	xSeries	1	500	770048	18
c1server	IBM	xSeries	1	700	1028096	18
a2server	IBM	xSeries	1	500	770048	18
SAPOSCOL DBSERVER	IBM	xSeries	2	700	1028096	64

At the bottom are buttons for Back, Finish, and Cancel.

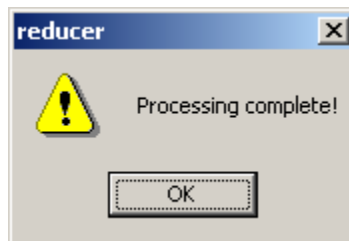
< Back Finish Cancel

Press the "Finish" button.

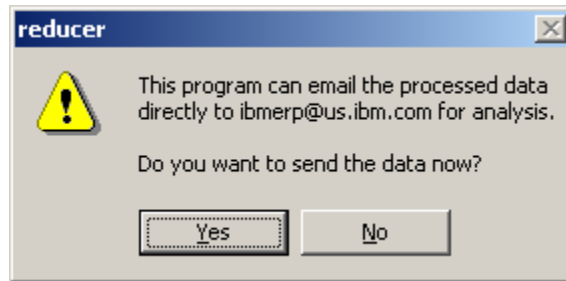
7. The reduction and compression processing will now run. Processing can be cancelled at anytime by pressing the “Stop” button. Processing can be restarted by pressing the “Start” button.



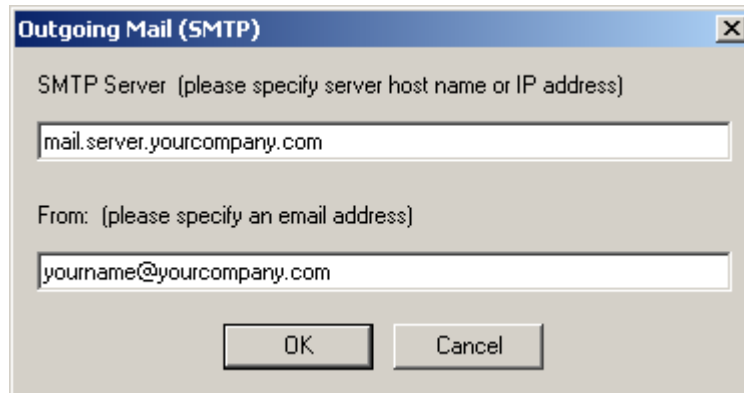
8. When the reduction and compression processing is complete, you will be prompted with a message box. Press the “OK” button.



9. Next you will be given the option to send an email with the *Insight* data attached directly to ibmerp@us.ibm.com for analysis. Installation of email software on the PC is **not required** to send the data. (ex: Microsoft Outlook, Lotus Notes, etc)

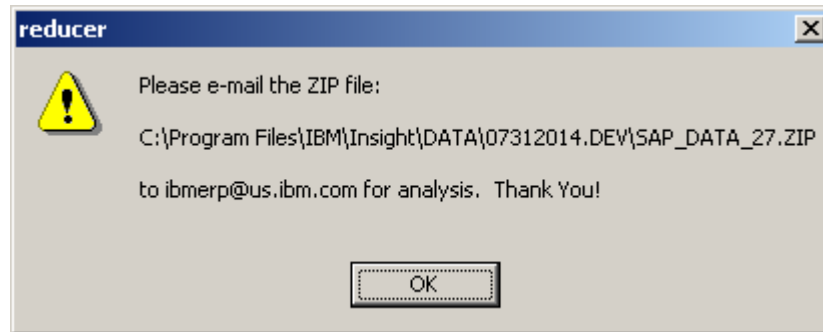


If you press the “Yes” button, you will be presented with the following dialog:



Enter your outgoing mail server’s IP address or hostname. Enter your company contact’s email address. Press the “OK” button to send the email. A courtesy copy will be sent to the contact’s email address.

If you don't want to send the email directly, press the "No" button, and you will be presented with the following message box:



The actual path of the ZIP file will depend upon your installation, data, and session directories.

In your email program, create a new mail with the following subject line:

Subject: Insight 2.7 data for <company name>

Complete the following mail body:

Company :
SAP SID :

Start : <date> <time>
End : <date> <time>

Contact :
Telephone :
email :

Rep/Partner :
Telephone :
email :

Reason :

Considerations :

Attach the ZIP file and send it to ibmerp@us.ibm.com for analysis.

2.7 Release Notes:

1. *Insight* now captures OS memory statistics and R/3 buffer statistics.
2. *Insight* now provides transaction detail by module.
3. *Insight* userid now requires the following authorizations:
S_ADMI_FCD (S_SACHBEARB)
S_C_FUNCT (S_C_FUNCT_AL)

2.6 Release Notes:

1. *Insight* now supports R/3 releases 3.0D thru 4.6C.
2. The *Insight* processing is accomplished using two separate executables, collector26.exe and the reducer26.exe.
3. The Survey.doc information is now entered in dialogs presented by the executables.
4. The user is allowed to specify the data drive and directory.
5. The *Insight* Reducer accuracy and performance have been greatly improved.
6. The *Insight* Reducer memory use is now more dynamic requiring less memory.
7. The *Insight* Reducer can be restarted in the event of a memory or disk exception.
8. The *Insight* Reducer now compresses the reduced data. The user is not required to run PKZip from the command line or batch file.
9. The *Insight* Reducer can send the data directly for analysis. The user is not required to manually compose and send an email.