

# **Oracle Server Backup – User Guide**

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## Introduction

IBackup for Windows supports the backup of Oracle server databases (Oracle 9i, 10g and 11g). The installation, configuration and usage of this advanced database backup feature using IBackup for Windows have been simplified using a step-by-step approach.

The easy-to-use wizards simplify the critical task of backing up your production Oracle server databases without any database downtime. You have the flexibility to backup/restore Oracle server databases from a remote location (the Oracle client location). Only the modified portions of the database files are backed up, thereby helping you optimize their bandwidth and reduce time taken for backup. The ability to create log files for every backup/restore session helps you view the details of all the transactions being performed.

The IBackup for Windows application supports two distinct modes to restore the Oracle server database - Complete and Incomplete recovery.

**Note:** It is always recommended that Oracle database backup/restore is performed with the assistance of/by a qualified Oracle database administrator (DBA).

IBackup's Oracle server database backup is downloadable from the IBackup website <u>http://www.ibackup.com</u> as a plug-in.



## **Oracle Server Backup**

IBackup for Windows allows you to backup the Oracle server databases to your IBackup account without interrupting the Oracle server services that are already running. You can also schedule the backups for a later date and time.

### **Features**

- > Authentication of the Oracle server database for backup
- Provision to report the progress of the backup process
- > Provision to restore 30 previous versions of all backed up files
- > Option to retrieve deleted files from Trash within a 30 day period
- Enhanced security with 256-bit AES encryption on transfer and storage with a user-defined encryption key that is not stored anywhere on IBackup servers
- > Provision to schedule backups for a future date and time with the various scheduling options
- > Easy-to-use wizards for scheduling the backup jobs
- > Provision for Email and Desktop notifications upon completion of the scheduled backup jobs
- Provision to generate the log files for each backup session

**Note:** Refer http://www.ibackup.com/old-version.htm for the details related to architectural / feature set changes to the IBackup application (accounts created prior to 10th August 2011.)

#### **Requirements for Oracle server backup**

- Install the IBackup for Windows application on the computer where the Oracle 9i/10g/11g server/client is available
- The selected temporary directory on your local computer should have sufficient free disk space to hold the Oracle 9i/10g/11g database backups
- > The database must be in ARCHIVELOG mode
- > The Oracle server user should have SYSDBA privilege
- Oracle Recovery Manager (RMAN) should be available on the computer where the IBackup for Windows application has been installed

Note: Consult your Oracle DBA for details on the configuration parameters.

#### How to enable ARCHIVELOG Mode

To enable ARCHIVELOG Mode using the Oracle Recovery Manager (RMAN), follow the steps given below:

- 1. RMAN> connect target <username>/<PWD>@<SID> [connect to your Oracle database];
- 2. RMAN> shutdown immediate;





- 3. RMAN> startup mount;
- 4. RMAN> sql 'alter database archivelog';
- 5. RMAN> alter database open;

## **System Requirements**

#### For Oracle 9i

- > Pentium 166 MHz or higher processor
- > 128 MB RAM (256 MB recommended)
- Hard disk space of about 140 MB on the System Drive with an additional 4.5 GB for the Oracle Home Drive (FAT) or 2.8 GB for the Oracle Home Drive (NTFS)
- Sufficient free hard disk space to store the database backup files
- Microsoft Windows XP, Windows Server 2003, Windows 2000 with service pack 1, and Windows NT 4.0 with service pack 5

#### For Oracle 10g/11g

- Minimum 200 MHz processor
- Minimum 256 MB RAM (512 MB recommended)
- > 1.5 GB hard disk space
- Sufficient free hard disk space to store the database backup files
- Microsoft Windows XP Professional, Windows Server 2003, Windows 2000 with service pack 1 or higher, Windows NT Server 4.0 and Windows NT Server Enterprise Edition 4.0 Terminal Server Edition with service pack 6a or higher



## How to backup Oracle server to your IBackup account

Listed below are the steps to backup the Oracle server databases to your IBackup account:

Step 1

#### Access the Oracle Server Backup option

You can do so in two ways:

- > On the application Menu Bar go to Backup-Restore > Oracle Server > Oracle Server Backup
- On the application Tool Bar, go to Wizards > Advanced Backup > Oracle Server > Oracle Server Backup





### Step 2

The Oracle server login screen is displayed as shown below.

Oracle Server	Login	<b>EX</b>
Username	SYSTEM	
Password	******	
	(SYSDBA Privileges)	
Host String	EMPLOYER	
	Login Close	

On this screen,

- 1. Enter the Username and Password.
- 2. Enter the Host String (database name or tnsnames and so on) and click the 'Login' button.





On the Oracle server backup screen, click the 'Browse' button and select a temporary location on your local computer where the Oracle server backups would be stored.

Modified Date	
12/23/2008 5:53	
12/23/2008 6:05	
1/27/2009 1:30:	
1/28/2009 4:22:	
1/20/2009 3:52:	
1/20/2009 6:28:	
1/27/2009 11:09	
1/28/2009 4:25:	
1/28/2009 4:03:	
1/27/2009 8:40:	
12/23/2008 6:05	
12/23/2008 10:3	-
	Modified Date           12/23/2008 5:53           12/23/2008 6:05           1/27/2009 1:30:           1/28/2009 4:22:           1/20/2009 3:52:           1/20/2009 6:28:           1/27/2009 11:09           1/27/2009 12:00           1/28/2009 4:25:           1/28/2009 4:25:           1/28/2009 4:25:           1/27/2009 8:40:           1/27/2008 6:05           12/23/2008 10:3

**Note:** Ensure that the selected temporary directory on the local computer has sufficient free disk space to hold the Oracle server backup resources.



The selected temporary directory is displayed on the 'Oracle Server Backup' screen as shown below.

racle Server Backup			<b>?</b> X
Select the lo	cation on your Oracle Server for	the backup operation.	
Oracle Backup location			Browse
Note: The backup location sho	uld be at the place where the O	acle database service is currently ru	nning.
EMPLOYER	ARCHIVELOG	1974806737	
		<back< td=""><td>Next &gt; Close</td></back<>	Next > Close

Click the 'Next' button.



### Step 5

Select a folder in your IBackup account and click the 'Next' button.

cle Server backup destination	
Select a folder for backup/restore	
Name	Modified Date
<ul> <li>IB My IBackup</li> <li>Documents</li> <li>Lessons</li> <li>Music</li> <li>Video</li> <li>Pictures</li> <li>email</li> </ul>	1/27/2009 3:48:12 AM PST 1/27/2009 10:17:01 PM PST 1/26/2009 10:20:25 PM PST 1/24/2009 2:02:24 AM PST 1/23/2009 5:33:23 AM PST 1/26/2009 10:11:24 PM PST
Instination selected My IBackup/	





In the 'Schedule backup/restore' screen, take an immediate backup using the 'Start the job immediately' option or schedule it for a future date and time and click the 'Close' button.

Schedule backup	_	-	_	_	_	<b>:?</b> : 6
Set the day(s) of the v	veek, time and email (	notification	for the schedule back	kup/restore jobs		
V	V	~	7	~	7	
Sunday	Monday 1	luesday	Wednesday	Thursday	Friday	Saturday
Daily Schedule      Start the job immed      Hourly Schedule      Monthly Schedule      Schedule Time : 3:      Backun/Restore schedule	diately 12 of every n 17:00 AM	nonth	Notify me on the     Cut-off Time     Cut-off Time     Email Notificatio     Imjohn@myworld.c Example: joseph@g	e desktop when th 4:02:01 PM on ( Notify com gmail.com, thomas	e scheduled job is	i complete tify on failure
Backup Set	Next Transfer	Status	Destination		Scheduled dav	(s)
IBORACLEBkset(EMPLO	1/13/2010 3:17		My IBackup/		Sunday, Monda	y,Tuesday,Wednes
•		-				•
						Close

**Note:** IBackup for Windows allows you to schedule the Oracle server backup for different database instances. For easy identification of the Oracle server backup set, the name of the backup set will begin with 'IBORACLEBkset' followed by the Database SID (Database System Identifier) name that you have scheduled for backup.

For example: If the Database SID name is 'JOHN,' then the name of the backup job will be IBORACLEBkset (JOHN\_DB).'



## **Oracle Server Restore**

Backup for Windows allows you to restore the backed up Oracle server databases from your local computer to your Oracle server in a secure, quick and a reliable way.

#### **Features**

- > Authentication of the Oracle server database for restore
- Provision to report progress of the restore process
- Enhanced security with 256-bit AES encryption on transfer and storage with a user-defined encryption key that is not stored anywhere on IBackup servers
- Provision to restore 30 previous versions of all backed up files
- > Option to retrieve deleted files from Trash within a 30 day period
- Provision to generate log files for each restore session

#### **Requirements for restore**

Following are the requirements for Oracle server restore:

- Install the IBackup for Windows application on the computer where the Oracle 9i/10g/11g server/client is available
- The selected temporary directory on your local computer should have sufficient free disk space to hold the Oracle 9i/10g/11g database restores
- > The database must be in ARCHIVELOG mode
- > The Oracle server user should have SYSDBA privilege
- Oracle Recovery Manager (RMAN) should be available on the computer where the IBackup for Windows application has been installed

#### **Note:** Consult your Oracle DBA for details on the configuration parameters.

#### How to enable ARCHIVELOG Mode:

To enable ARCHIVELOG Mode using the Oracle Recovery Manager (RMAN), follow the steps given below:

- 1. RMAN> connect target <username/PWD>@<SID> [connect to your Oracle database];
- 2. RMAN> shutdown immediate;
- 3. RMAN> startup mount;
- 4. RMAN> sql 'alter database archivelog';
- 5. RMAN> alter database open;



## How to restore your Oracle server database

Follow the steps below, to restore your Oracle server databases from your computer to the Oracle server.

#### Step 1

Access the Oracle Server Restore option in any of the following ways:

- On the application menu, go to Backup-Restore menu option > Oracle Server > Oracle Server Restore
- On the application Tool bar > go to Advanced Backup > Oracle Server > Oracle Server Restore

File E	ackup-Restore Log	3 7	Tools Help			
-	Restore			<b>A</b>		
9	SQL Server	,			<b>U</b>	
Wizar	Exchange Server	٠	ore Backup set Juler Manager	Mirror Path	Sync	
	SharePoint Server	•	Jut of 50 00 GB	9	20%	<b>) 61 X</b>
- • ·	Oracle Server	•	Oracle Server Backup			
Name	System State data	,	Oracle Server Restore	ame		
+ 🗸	Desktop		Session Log	IB	My IBackup	



The 'Oracle Server Restore Wizard' explaining the restore procedure is displayed. Click the 'Next' button to proceed.

Oracle Server Restore Wizard 🛜 🐼
Oracle Server Restore Wizard
This wizard will assist you to perform the Oracle server database restore operation.
Key features:
-Oracle server database authentication
-Provision to perform Complete and Incomplete recovery
-Generate activity log and trace messages for Oracle server restore
Note: Generate activity log and trace messages for Oracle server restore.
For the Oracle restore operation, download the latest Oracle Backup set 'IBORACLEBackup' folder from your IBackup account and place it at the original backup location.
If the Oracle server database service is running on a remote computer, map the folder/drive from the remote server and place the 'IBORACLEBackup' backup folder on the original backup location.
We recommend an offline backup of your database files before you initiate the Oracle server restore operation.
< <u>Back</u> <u>N</u> ext > <u>Close</u>



### Step 3

The 'Oracle Server Login' screen is displayed as shown below.

Oracle Server	Login	<b>EX</b>
Username	SYSTEM	
Password	******	
	(SYSDBA Privileges)	
Host String	EMPLOYER	
	Login Close	

On this screen,

- 1. Enter the Username and Password.
- 2. Enter the Host String (database name or tnsnames and so on) and click the 'Login' button.



On the 'Oracle Restore screen', using the 'Browse' button, select the folder where you wish to restore the Oracle server database files. The selected folder is displayed on the Oracle Restore screen as shown below.

Oracle Server Restore				<b>??</b> 😣
Restore	e the database back	up file(s) to your Ora	cle server.	
Select the Oracle Backup folder 'IBORACLEBackup'	C:\Oracle_da	tabase		Browse
Note: To perform the Oracle re	store operation, plac	e the 1BORACLEBac	kup' backup folder to th	e original backup location.
The 1BORACLEBackup/ b     Complete Recovery     InComplete Recover	ackup folder at the o	riginal backup locatio	n.	
DATABASE NAME	BACKUP DATE	BACKUP TIME	LOG MODE	DBID 1974906727
EMPLOYER	172072005	10.33.20	Anoniveedd	13r400r3r
•				<u> </u>
				Restore Close

You can choose the mode of recovery, based on your restore needs:

**Complete Recovery:** Restores all the Oracle server database files that have been backed up till now.

**Incomplete Recovery:** This is a time-based recovery of Oracle databases. It restores files as of a date and time that you have specified for restore.

**Note:** Select the same folder 'IBORACLEBackup' where the Oracle server databases were previously backed up. If you have deleted the folder, create the folder with the same name using same path, while performing backup.



The selected folder along with the Oracle server database name is displayed in the 'Oracle Server Restore' screen as shown below.

Click the 'Restore' button to retrieve the Oracle server database files.

Oracle Server Restore				_	? 🔀
Restore	the database backup	o file(s) to your Ora	cle server.		
Select the Oracle Backup folder 'IBORACLEBackup' Note:	C:\Documents an	d Settings\Administr	ator\Desktop\Drael\IB	ORACLEBackup\ Browse	
To perform the Oracle res If the Oracle server datab the 1BORACLEBackup' ba	store operation, place lase service is runnin lickup folder at the ori	the 'IBORACLEBac g on a remote comp ginal backup locatio	kup' backup folder to th outer, then map the fold n.	ne original backup location. ler/drive from the remote server an	nd place
C InComplete Recovery	,				
DATABASE NAME	BACKUP DATE	BACKUP TIME	LOG MODE	DBID	
TEST	1/28/2009	16:39:20	ARCHIVELOG	1974806737	
<b>I</b>				Restore Close	



A message, as shown below, appears. If you click the Yes button, the database files present on your Oracle server would be overwritten.

lBackup	for Windows 🔀
<b>?</b>	The Oracle server restore operation will overwrite the database files on your Oracle server. We recommend an offline backup of the same. Would you like to proceed with the restore operation?

#### Step 7

On completion of the Oracle server restore process, a message is displayed, as shown below.



#### **Incomplete Recovery**

Incomplete Recovery is a time-based recovery of the Oracle databases. This restores the Oracle server database files, of a particular date and time, specified during restore.

To perform the Incomplete Recovery of your Oracle database(s)

Perform the above-mentioned steps till Step 3.



### Step 4

On the Oracle Restore screen, select the option 'Incomplete Recovery.'

Oracle Server Restore				? 🔀
Restore	the database back	up file(s) to your Ora	cle server.	
Select the Oracle Backup folder 'IBORACLEBackup'	C:\Oracle_da	atabase		Browse
Note:				
To perform the Oracle res	tore operation, plac	e the IBORACLEBac	kup' backup folder to th	e original backup location.
the 'BORACLEBackup' ba	ckup folder at the o pto which you want	riginal backup location	in. for the Incomplete recover	ery.
DATABASE NAME	BACKUP DATE	BACKUP TIME	LOG MODE	DBID
EMPLOYER	1/28/2009	16:39:20	ARCHIVELOG	1974806737
-				Restore Close



Double-click the database name (displayed on the list box of the above screen) and enter/select the appropriate date and time.

The date and time selected for Incomplete recovery of the databases should not be less than the database creation time or resetlogs creation time.

Click the 'Save' button.

Incomplete Recovery	<b></b>
Specify the until date and time to pe Incomplete recovery (time based rea	rform the covery)
01/29/2009 17:05:10	•
	Save

Now click on the 'Restore' button and follow the procedure from Step 5.

On completion of the Oracle server restore process, a message confirming its success is displayed. You may view the logs for a complete summary of restore operation.



## Troubleshooting

The following are few simple troubleshooting methods, which could resolve few minor problems while working with IBackup for Windows application.

- Windows 2000 you must have service pack 2 or higher installed on the machine for encryption on storage to work properly
- > You must have proper privileges to register the files required during installation
- It is highly recommended to have the latest service pack for Windows installed on the computer
- The system must have an ATX power supply and provide appropriate support in order for Automatic Power off to work, otherwise the machine will just reboot
- > IBackup for Windows requires proxy settings if the computer is behind a proxy
- When the application hangs for a long time and no transfer occurs, Logout of the application and login into the application again.



## **IBackup Support**

Pro Softnet Corporation, IBackup Division, 26115 Mureau Road, Suite A, Calabasas, CA 91302.

#### Telephone

1-800-949-3555 ext 3 within USA 1-818-251-4200 ext 3 outside USA Monday - Friday, 6:00 AM to 6:00 PM PST

Fax 1-818-878-9208

#### **Email address**

<u>support@ibackup.com</u>
For more information visit: <u>http://www.ibackup.com/</u>