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Backup Database

By: Ahmad Syauqi Ahsan

ORACLE

Tujuan

Setelah menyelesaikan bab ini, anda seharusnya dapat melakukan hal-hal berikut:

- Membuat backup database secara konsisten
- Membuat backup database anda tanpa harus mematikannya
- Membuat incremental backup
- Mengotomatiskan pembuatan backup database
- Memonitor flash recovery area

Terminologi

- Backup strategy boleh mengikutkan :
  - Keseluruhan database (whole)
  - Bagian dari database (partial)
- Backup type boleh berupa :
  - Segala informasi dari seluruh data files (full)
  - Hanya informasi yang telah berubah sejak pembuatan backup sebelumnya (incremental)
- Backup mode boleh berupa :
  - Offline (consistent, cold)
  - Online (inconsistent,hot)

Terminologi

Backup bisa disimpan sebagai :

- Image Copies
- Backup Seats

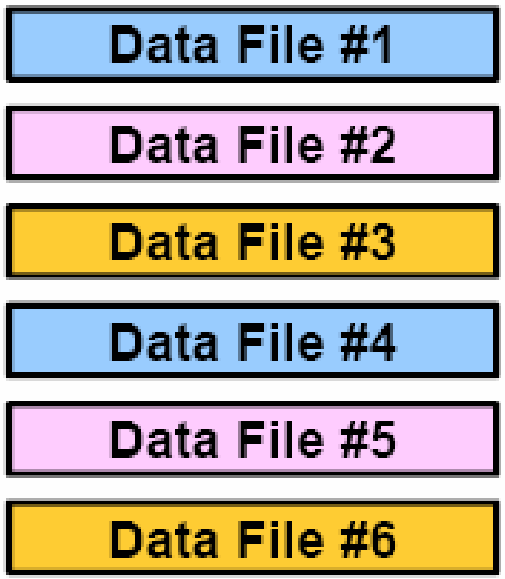
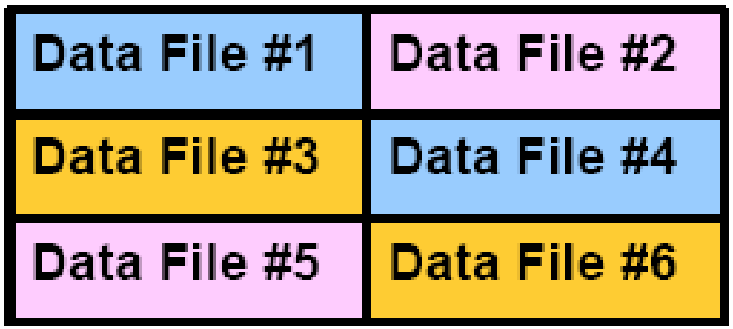


Image copies



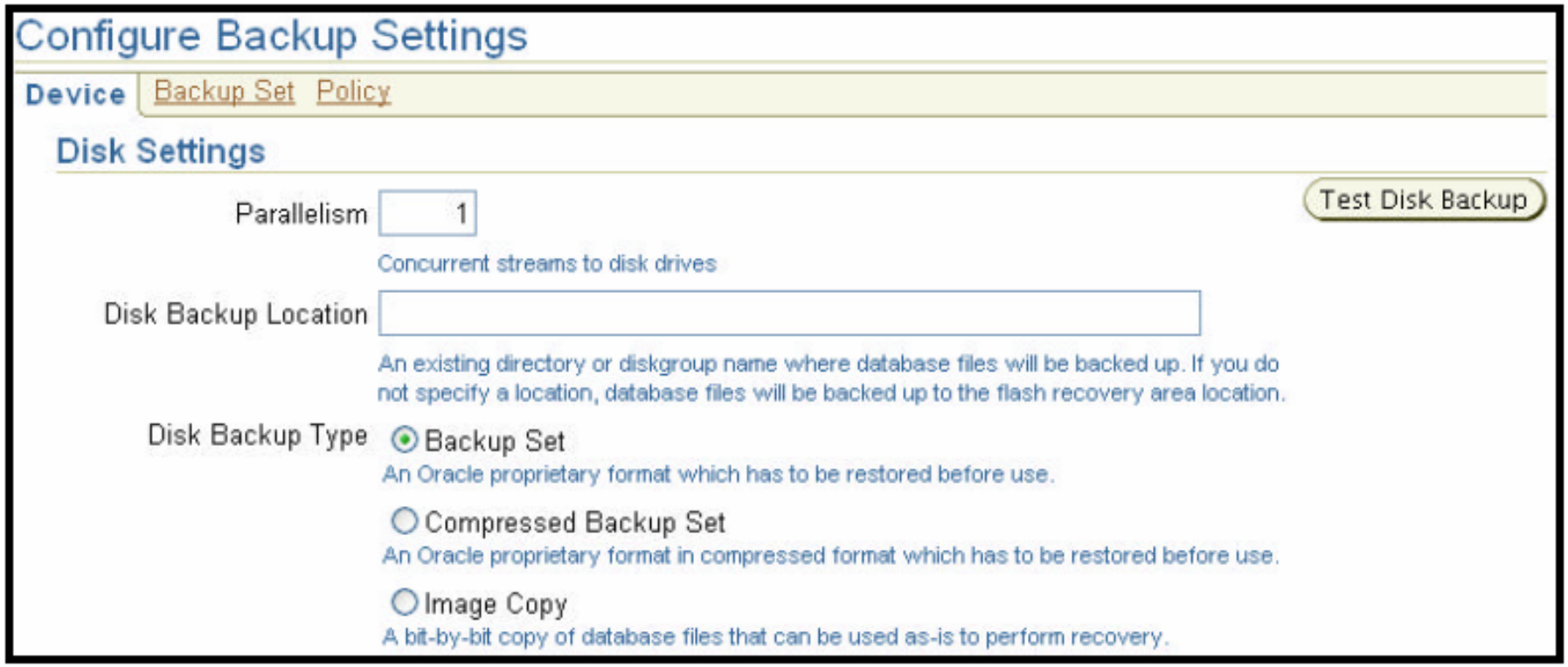
Backup set

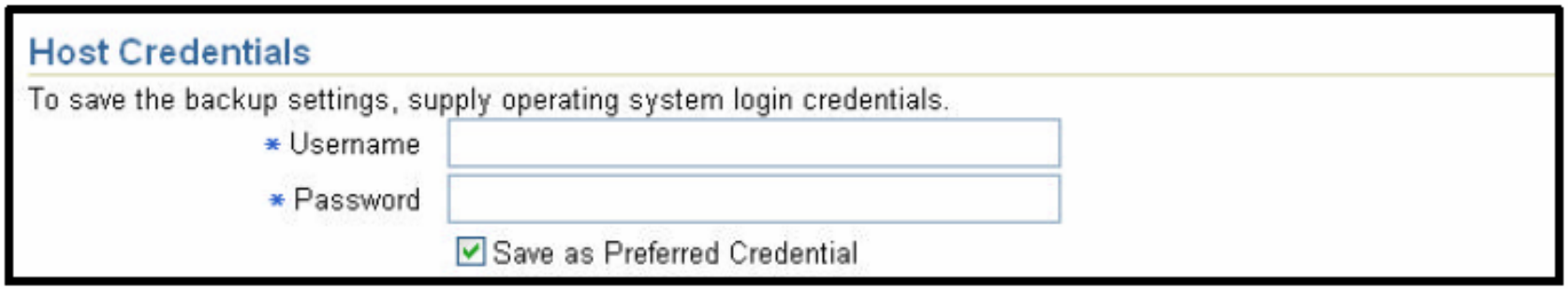
Recovery Manager (RMAN)

Enterprise Manager menggunakan Recovery Manager (RMAN) untuk melaksanakan operasi-operasi backup dan recovery.

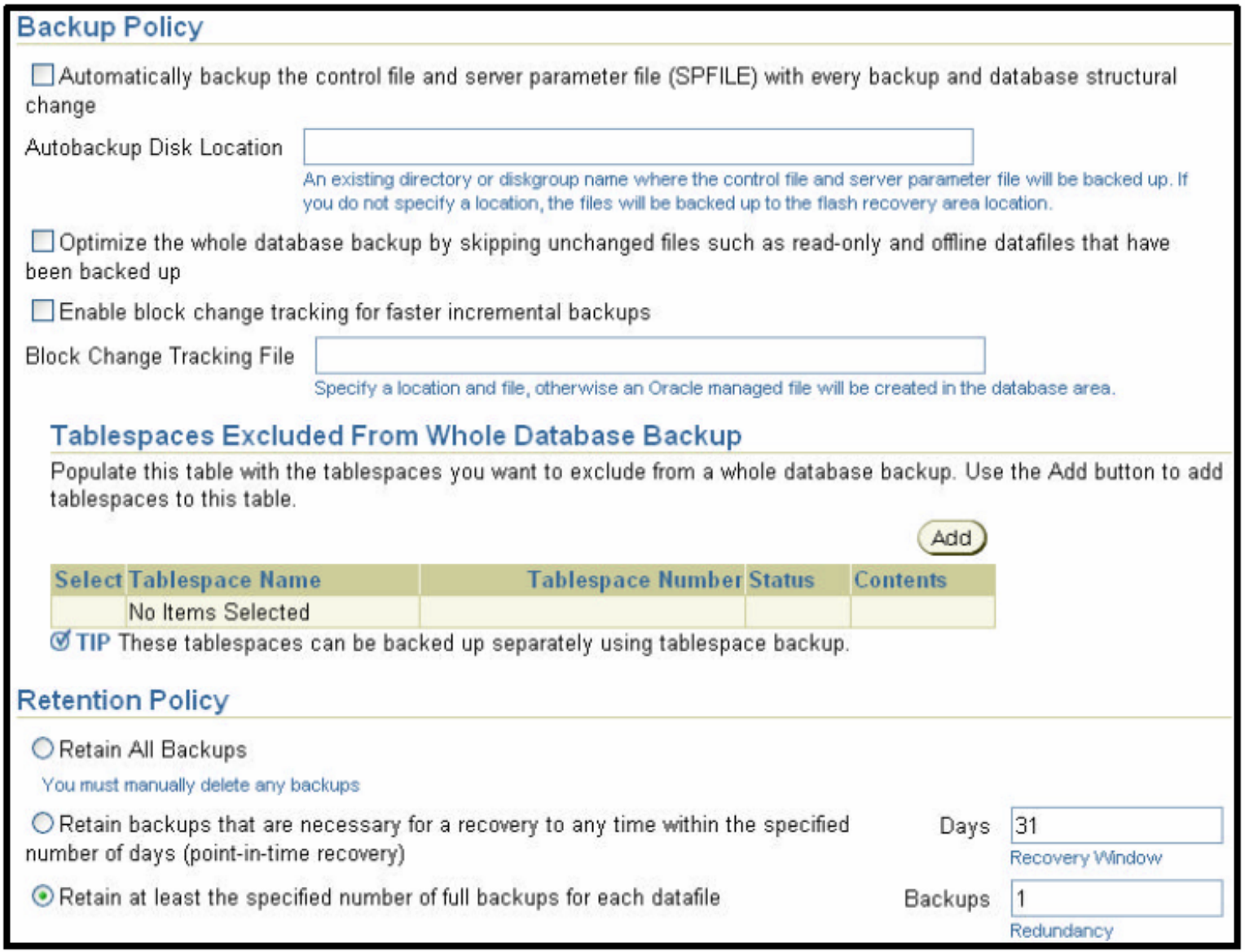
- Baris perintah client untuk fungsi-fungsi advanced
- Kontrol yang sangat kuat dan bahasa scripting
- Mempublikasi API yang mengijinkan antar muka dengan software backup yang paling populer
- Backs up data, kontrol, archieved log, dan file-file server paramater
- Backs up file-file ke dalam disk atau tape.

Mengkonfigurasi Setting Backup



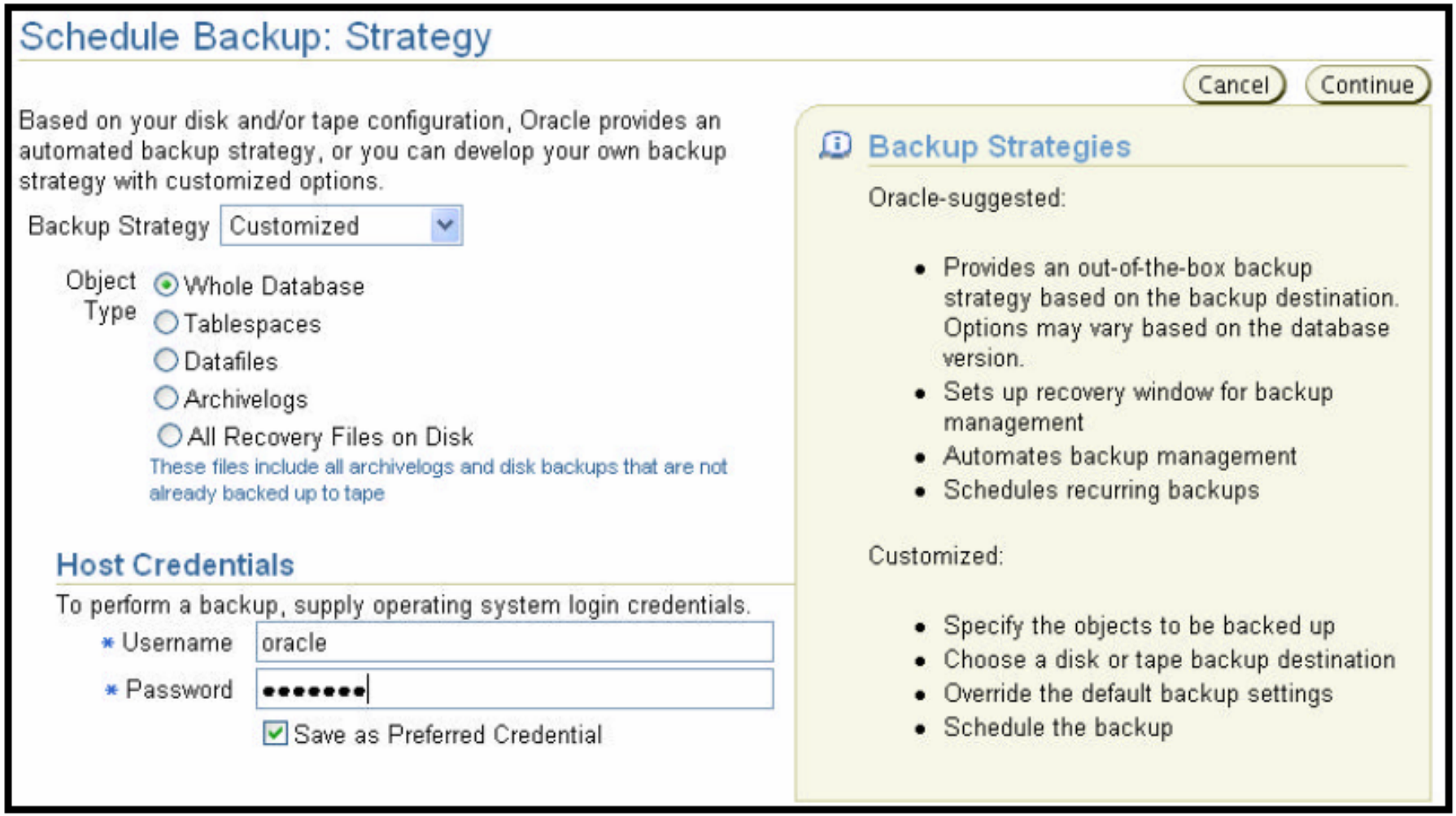


Mengkonfigurasi Setting Backup

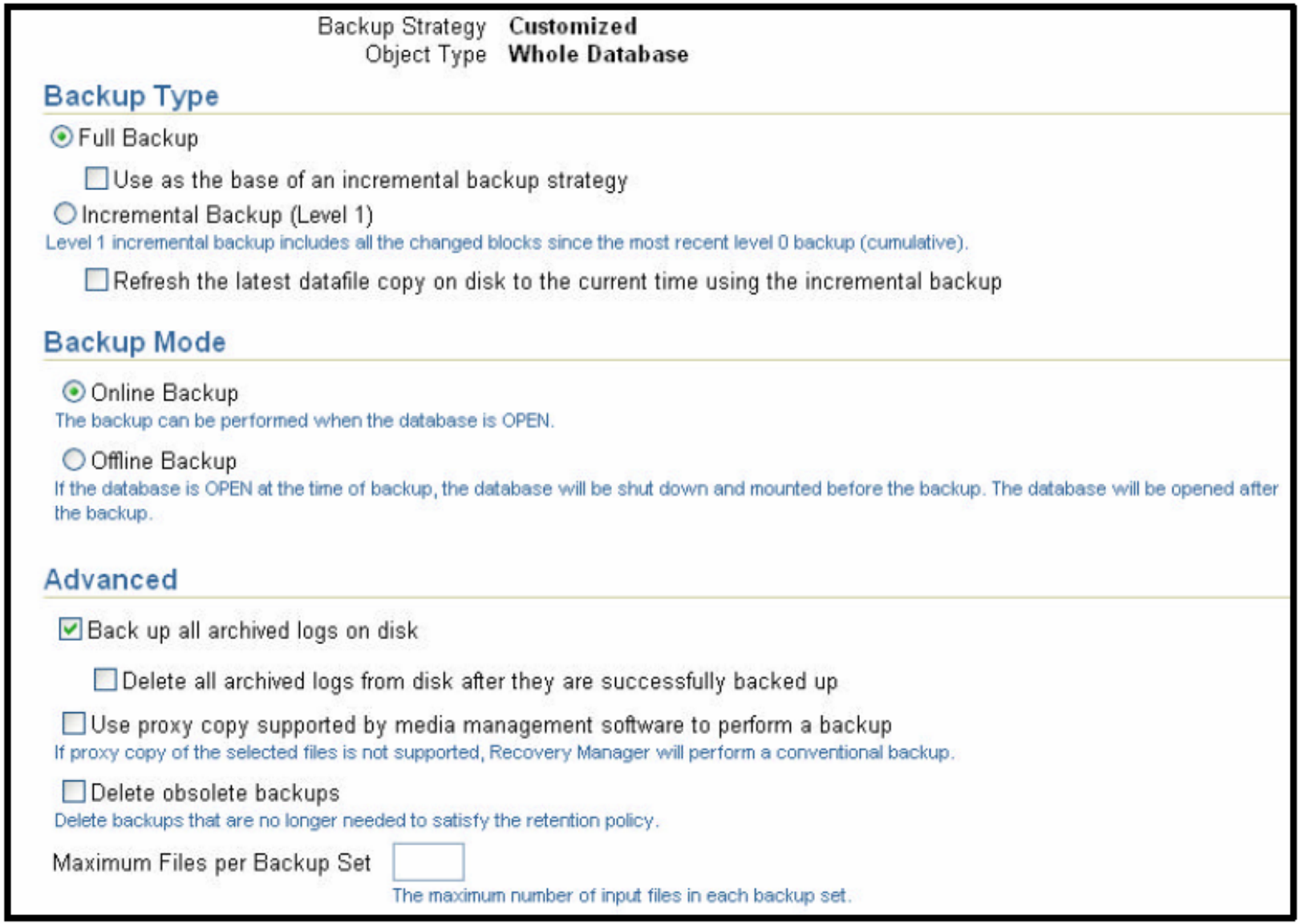


Menjadwal Backup: Strategi

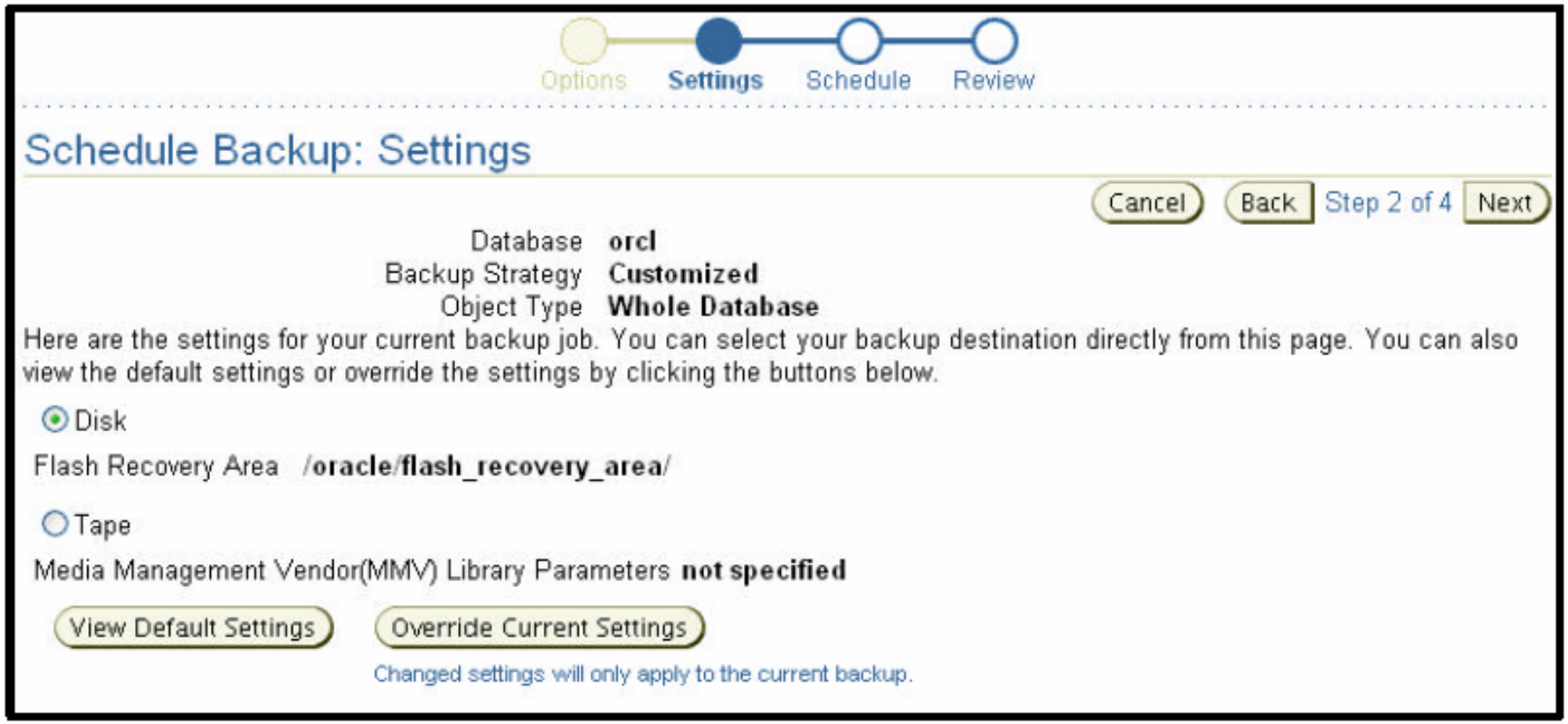
Memilih keseluruhan atau sebagian untuk backup database



Menjadwal Backup: Option

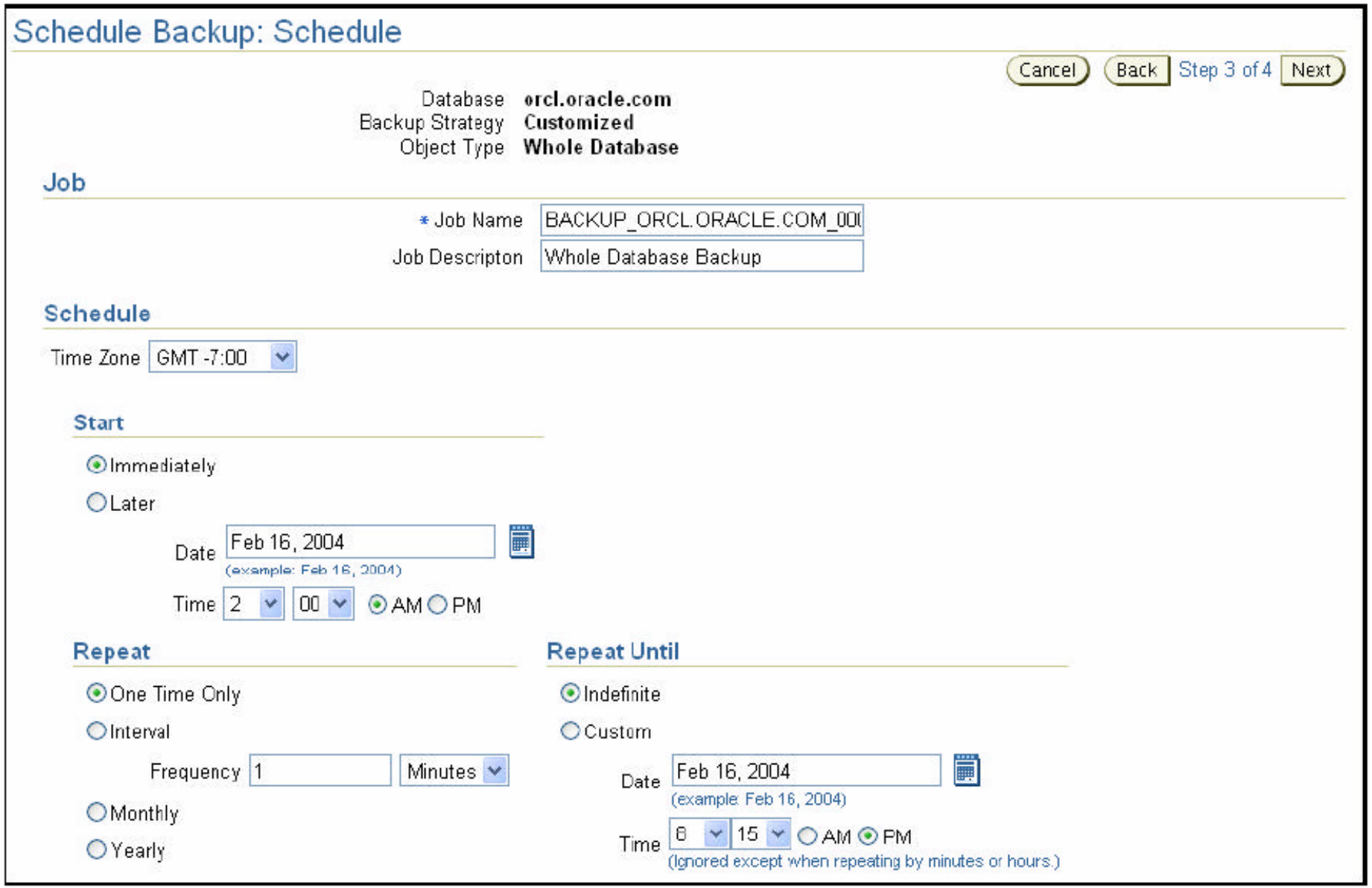


Menjadwal Backup: Setting

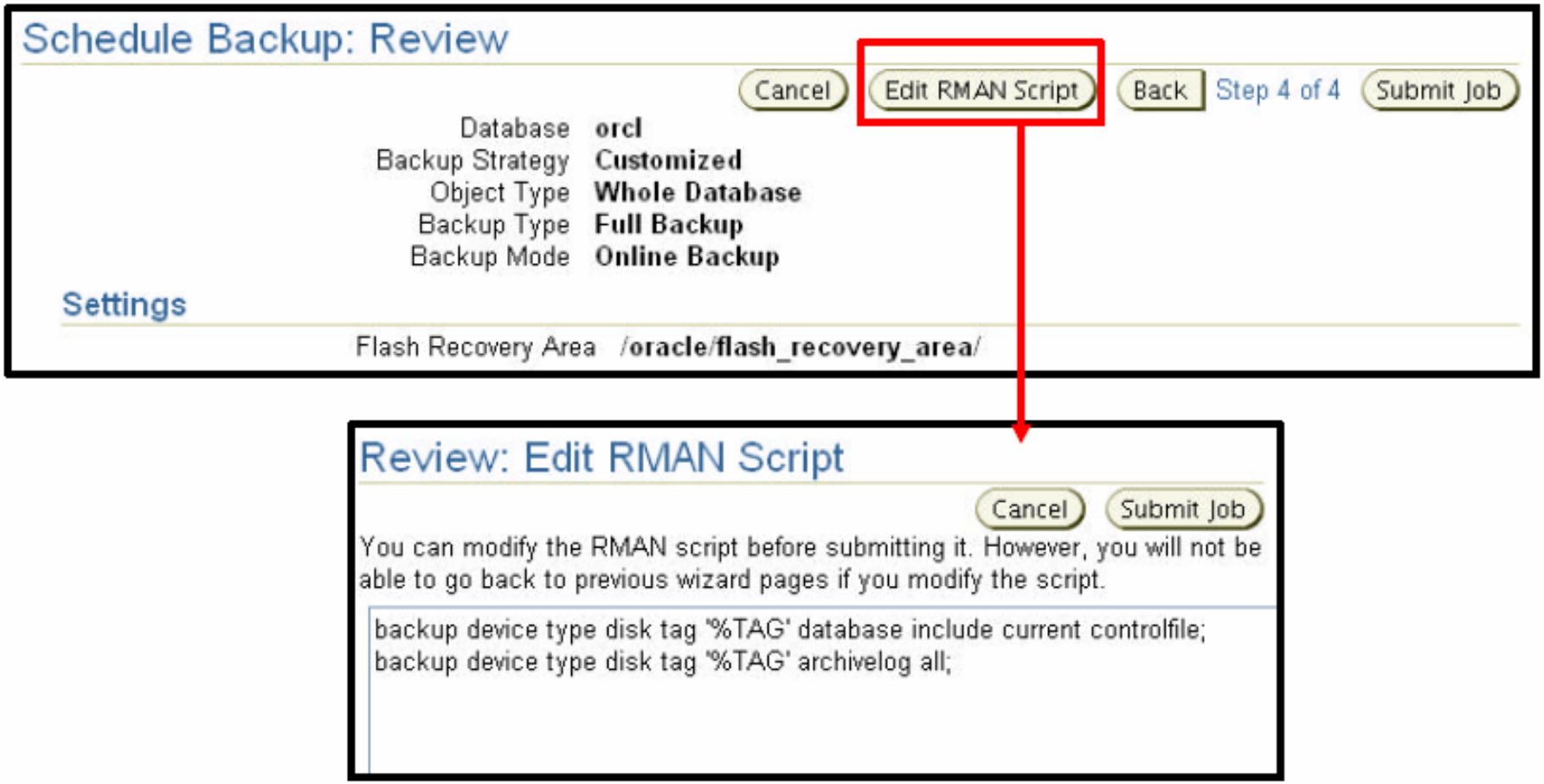


Setting konfigurasi persistent backup sebelumnya, dapat ditimpa dengan untuk backup saat ini dengan meng-klik Override Current Settings.

Menjadwal Backup: Jadwal



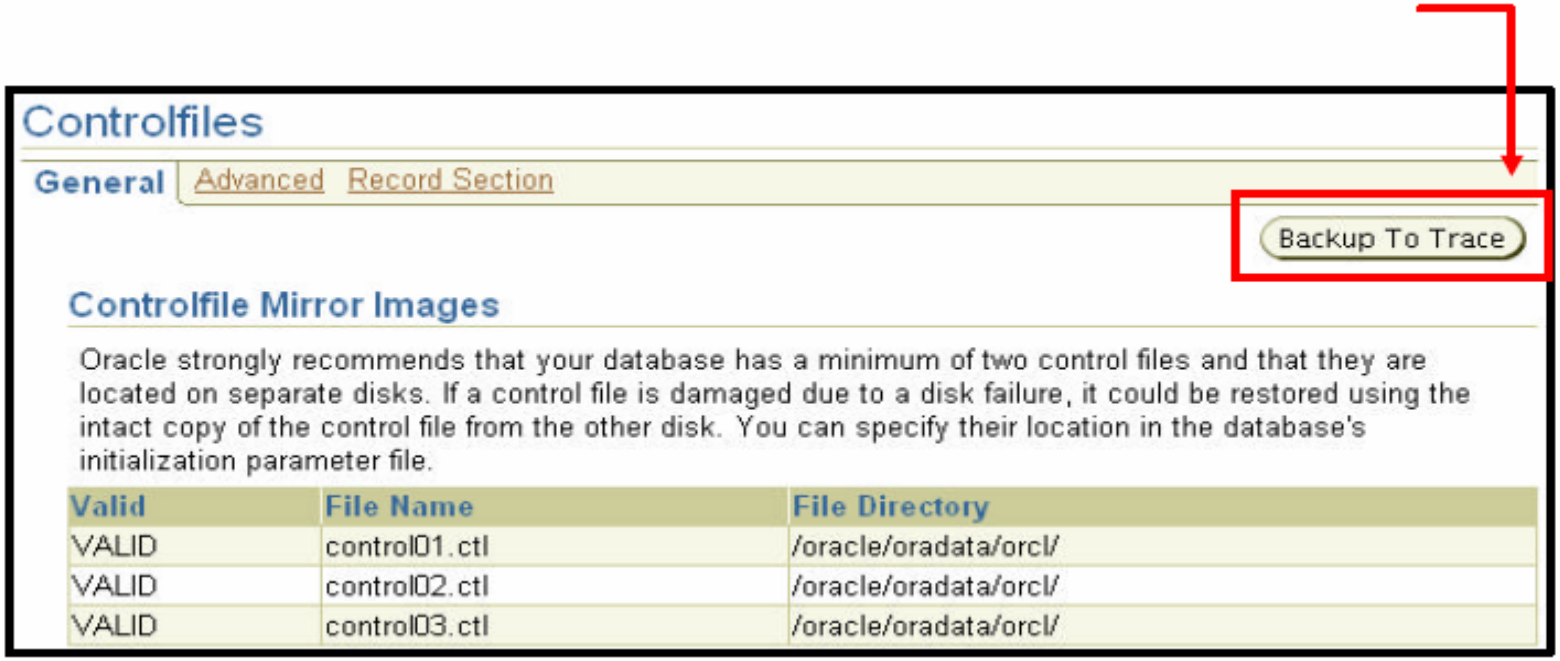
Menjadwal Backup: Review



Klik Edit RMAN Script untuk mereview perintah2 RMAN

Mem-backup Control File ke Trace

Control file mempunyai opsi tambahan untuk melakukan backup

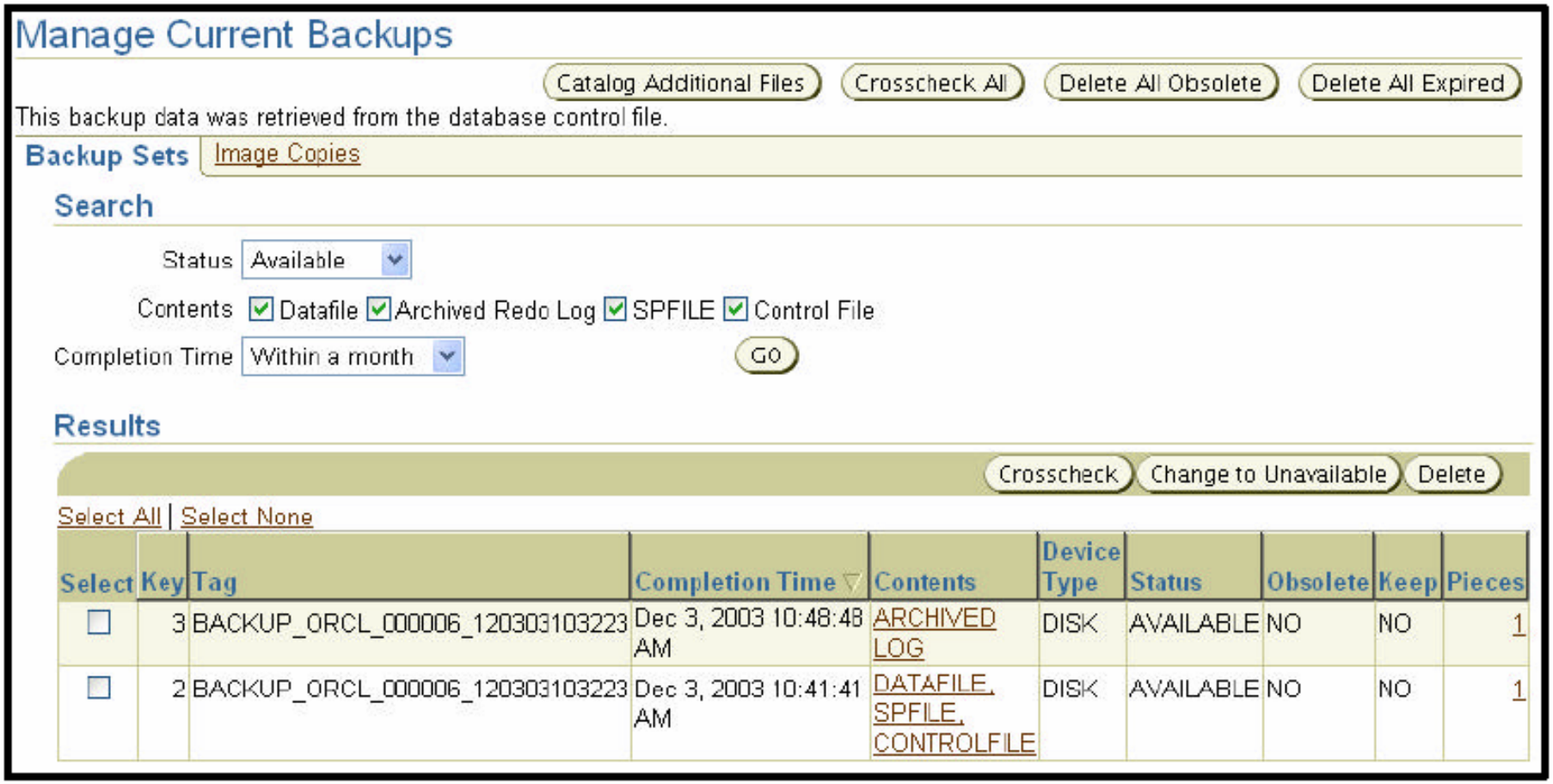


Backup control file ke trace dapat digunakan untuk recovery bila terjadi kehilangan semua control file

Mem-backup Control File ke Trace

```
CREATE CONTROLFILE REUSE DATABASE ORCL NORESETLOGS ARCHIVELOG
    MAXLOGFILES 16
    MAXLOGMEMBERS 3
    MAXDATAFILES 100
    MAXINSTANCES 8
    MAXLOGHISTORY 226
LOGFILE
  GROUP 1 '/oracle/oradata/orcl/redo01.log'  SIZE 10M,
  GROUP 2 '/oracle/oradata/orcl/redo02.log'  SIZE 10M,
  GROUP 3 '/oracle/oradata/orcl/redo03.log'  SIZE 10M
DATAFILE
  '/oracle/oradata/orcl/system01.dbf',
  '/oracle/oradata/orcl/undotbs01.dbf',
  '/oracle/oradata/orcl/sysaux01.dbf',
  '/oracle/oradata/orcl/users01.dbf',
  '/oracle/oradata/orcl/example01.dbf'
CHARACTER SET WE8ISO8859P1;
-- Commands to re-create incarnation table
-- Below log names MUST be changed to existing filenames on
-- disk. Any one log file from each branch can be used to
-- re-create incarnation records.
-- ALTER DATABASE REGISTER LOGFILE
  '/oracle/flash_recovery_area/ORCL/archivelog/2003_12_05/o1_mf_1_
  1_%u_.arc';
-- ALTER DATABASE REGISTER LOGFILE
  '/oracle/flash_recovery_area/ORCL/archivelog/2003_12_05/o1_mf_1_
  1_%u_.arc';
-- Recovery is required if any of the datafiles are restored
  backups,
-- or if the last shutdown was not normal or immediate.
RECOVER DATABASE
-- All logs need archiving and a log switch is needed.
ALTER SYSTEM ARCHIVE LOG ALL;
-- Database can now be opened normally.
ALTER DATABASE OPEN;
-- Commands to add tempfiles to temporary tablespaces.
-- Online tempfiles have complete space information.
-- Other tempfiles may require adjustment.
ALTER TABLESPACE TEMP ADD TEMPFILE
  '/oracle/oradata/orcl/temp01.dbf'
     SIZE 20971520  REUSE AUTOEXTEND ON NEXT 655360  MAXSIZE
  32767M;
```

Mengelola Backup

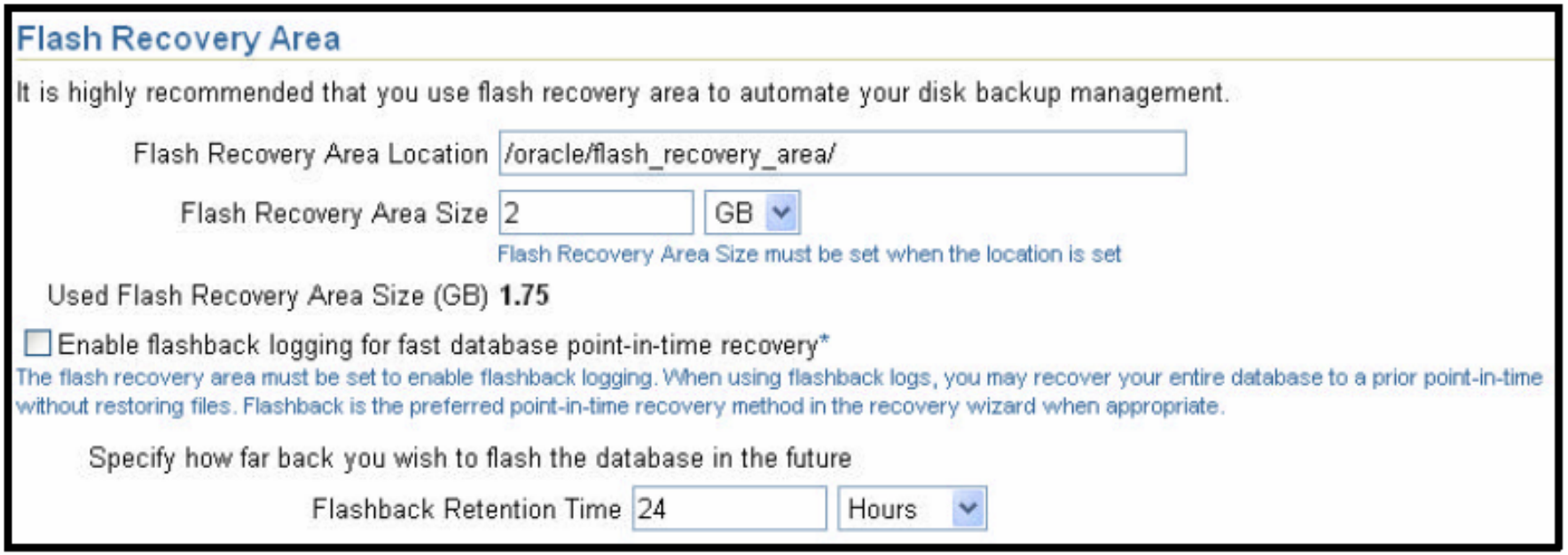


Klik Edit RMAN Script untuk mereview perintah2 RMAN

Flash Recovery Area

Monitor Flash Recovery Area

- Mengatur flashback logging
- Ukuran recovery area
- Monitor kebutuhan space yang digunakan



Ringkasan

Pada bab ini, anda seharusnya telah mempelajari bagaimana cara untuk:

- Membuat database backup secara konsisten
- Membuat backup database anda tanpa harus mematikannya
- Membuat incremental backup
- Mengotomatiskan pembuatan database backup
- Memonitor flash recovery area