

The background of the slide is a vibrant red. It is decorated with various digital and network-themed graphics. On the left side, there are faint, semi-transparent images of a code editor window with a '</>' symbol, a circular progress indicator, and a waveform graph. Scattered across the background are binary digits (0s and 1s) and a complex network diagram on the right side, featuring numerous nodes connected by lines, with a bright light source at one of the nodes.

Updates in Db2 Tools for Backup & Recovery

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Agenda

Updates in CA Log Analyzer

- Recovering LOB dropped objects
- Generating DCL reports
- Generating package reports

Updates in CA Fast Recover

- Recovery Simulation



Updates from CA Log Analyzer



Recent enhancements from CA Log Analyzer

- Recovering dropped LOB objects with Dropped Object Recovery
- Generating DCL reports
- Generating Package activity reports

Recovering LOB objects

Recovering LOB tables comes with additional challenges, mainly around managing the additional auxiliary Tablespaces:

Case in question:

- You create image copies with SHRLEVEL CHANGE.

Later... you need to recover those tables

- Result: Since SHRLEVEL CHANGE copies contain different RBAs, the result of the recovery is AUXW and AUXCHKP status.
 - This requires additional action from the DBA to go back to RW status.

Workaround: Create SHRLEVEL REFERENCE copies only for LOB objects

- Does your application allow that downtime? It's always an "it depends" scenario.

Recovering dropped LOB objects

Situation:

- SHRLEVEL CHANGE image copies on LOB objects.
- The LOB objects were dropped (accidentally).

Does that affect my ability to recover?

- Yes, if you do this manually
- ***Not anymore, if you use CA Log Analyzer***

Recovering LOB objects with CA Log Analyzer

What do I need for this?

The following PTFs introduce enhancements for this case, and its variants:

SO12900, SO12901, SO12899, SO12902.

Do I need to tell CA Log Analyzer that I want to recover from this tricky scenario?

Not at all.

Do I need to tell CA Log Analyzer that I'm recovering a LOB object?

Not at all.

Which object should I tell CA Log Analyzer that I'm recovering?

The base table will suffice.

How do I use the Dropped Object Recovery feature?

From the main menu, choose option (D)

```
Recovery Services
D - Dropped Object Recovery
```

And simply insert the name of the object, and the approx. time range when the drop occurred.

```
DROPPED OBJECT                                DB2 SSID: D11A
Type ==> TB ( DB - Database, TS - Tablespace, TB - Table )
Name ==> _____ >

TIME OF THE DROP
STARTING          ENDING
Date ==> 2020/05/15      Date ==> 2020/05/15      ( YYYY/MM/DD )
Time ==> 00:00:00.000000 Time ==> 08:10:00.000000 ( HH:MM:SS.UUUUUU )
```




Generating DCL reports



The DDL report is much more than just DDL

Through the main DDL report, you can generate a lot of information additional to only DDL statements:

Here, we'll focus on these 2 types of activity:

- Security activity (GRANT and REVOKE statements)
- Package related activity (BIND, REBIND, FREE commands)

This content can be generated together with your DDL activity that occurred in the time interval of the report.

What's new in this case?

What's new in DDL reports?

With **PTF SO12889**, now you won't need to post-process the DDL reports, and you can generate only the type of information you requested.

- Reports containing only security related statements (GRANT, REVOKEs)
- Reports containing only package related commands (BIND,REBIND,FREE)

```
MISCELLANEOUS OPTIONS
Grant/Revoke      ==> X ( I , X , 0 )
Bind /Rebind      ==> X ( I , X , 0 )
```

The (O) Only option will exclude the DDL activity and report only on these statements.

How do I recognize this filtering in my JCLs?

```
DDLREPT = (LEVEL (DETAIL)
           ,GRANTREV (ONLY)
           ,BINDRBND (EXCLUDE)
           ,LOBDATA (INCLUDE)
           ,OPTS (YES)
           ,INCLUDE (AND
                   ,AUTHID (ESTJA02 )
                   )
           ,GENDDL (REDO
                   ,GENOBIDS (YES)
                   ,URHEAD (NO)
                   )
           )
```

This setting will generate reports containing **only security statements**.

How do I recognize this filtering in my JCLs? (contd.)

```
DDLREPT = (LEVEL      (DETAIL)
           ,GRANTREV   (EXCLUDE)
           ,BINDRBND   (ONLY)
           ,LOBDATA    (INCLUDE)
           ,OPTS       (YES)
           ,INCLUDE    (AND
                        ,AUTHID (ESTJA02  )
                        )
           ,GENDDL      (REDO
                        ,GENOBIDS (YES)
                        ,URHEAD   (NO)
                        )
           )
```

This setting will generate reports containing **only PACKAGE related statements (BIND,REBIND,FREE)**.



CA Fast Recover. Recovery Simulation updates



Notes on Recovery Simulation

Recovery Simulation offers the means of proving whether a Db2 object can be recovered to any given recovery target. This feature will also inform about the following points:

Resources needed for the recovery (e.g. Archive logs that will need to be mounted, log apply if it's required, and others).

Recovery of the object to a shadow data set. This feature will perform an actual recovery on another dataset while the original remains available for the applications.

Time spent for this recovery.

What's required to execute a Recovery Simulation

This utility is run from batch, where we will need to specify 3 items through a **Fast Recover control card**:
Object or objects to be selected for recovery simulation.

Recovery Target.

The keywords **PREVIEW SIMULATE**, which will trigger a simulation.

Usage and output

RECOVER statement example:

```
//SYSIN DD *  
  RECOVER TABLESPACE <DBname>.<Tname> DSNUM 1  
          TABLESPACE <DBname>.<Tname> DSNUM 2  
          TABLESPACE <DBname>.<Tname> DSNUM 3  
SORT-LOG          NO  
TOCOPY            LAST-COPY  
PREVIEW SIMULATE /*
```

Note: Given that the original Tablespace is untouched, not all RECOVER options are compatible with PREVIEW SIMULATE.

What's new in Recovery Simulation?

We've added support to simulate recoveries with the following Image Copy types:

- **FlashCopy**
- **Concurrent Copies**

Do I need to make any changes to see this?

Not at all, processing is transparent to the user

Q&A

