Current patch

Primary   Standby

new capability

existing restore mechanism

synchronous replication

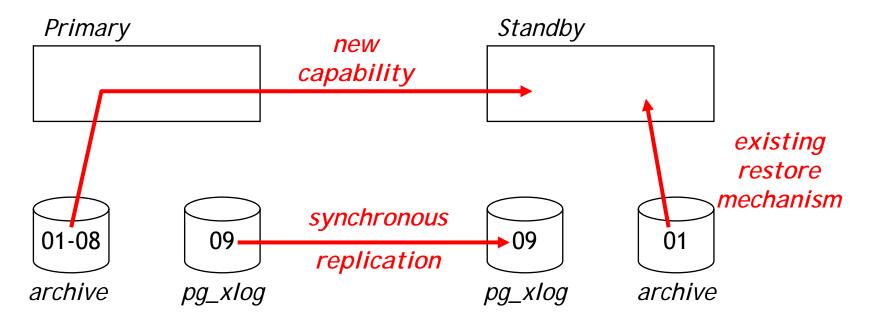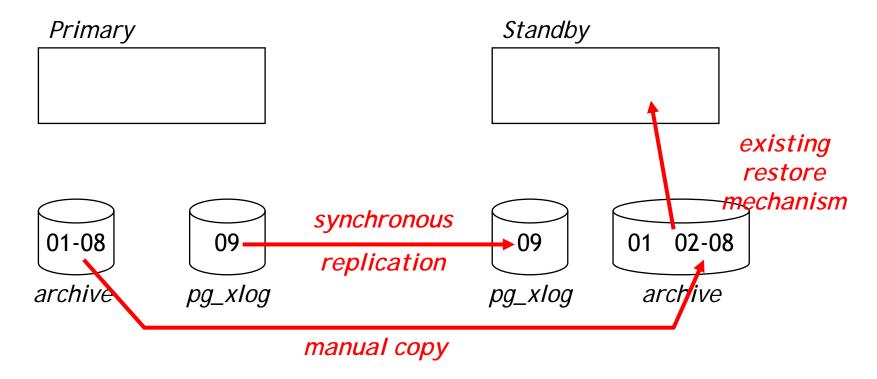| 01-08 | | 09 | | 09 | | 01 |

archive   *pg_xlog*   *pg_xlog*   *archive*

- The standby server starts a recovery from 01 which is redo starting position.

- 01 is restored and applied like a normal PITR.

- 02-08 is required for recovery, but exists only in an archive of the primary server.

- Those files are transferred to the standby server and applied.
  - There is no mechanism to do this, so new capability is necessary.

- The latest XLOG records (in 09 or later) are shipped by synchronous replication.

Previous patch

Primary

Standby

synchronous

replication

existing
restore
mechanism

01-08

09

09

01   02-08

archive

pg_xlog

pg_xlog

archive

manual copy

- *The standby server starts a recovery from 01 which is redo starting position.*

- *The missing XLOG files (02-08) are manually copied to the standby server.*

- *01-08 is restored and applied like a normal PITR.*

- *The latest XLOG records (in 09 or later) are shipped by synchronous replication.*