

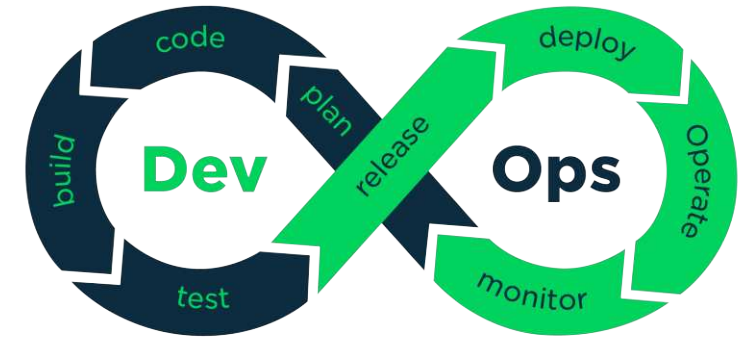


Staying alive

24/7



Database Changes with Zero Downtime



Live Deployments changes how we approach Database Changes



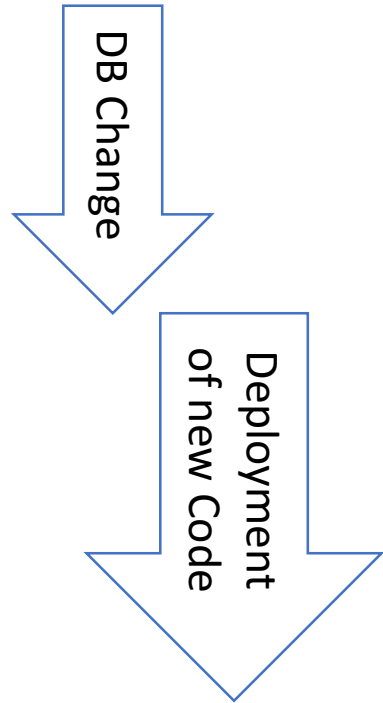
Dangers of Zero Downtime



Database Changes and Code Changes won't happen at the same time

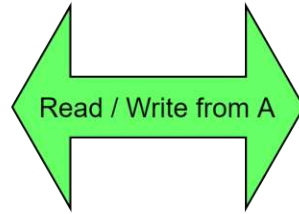


Your code may not be compatible with the new database schema



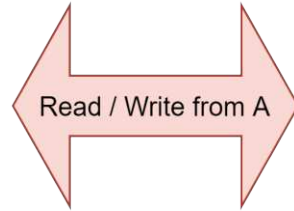
1.3

Table	
PK	<u>A</u>
1	Row 1
2	Row 2



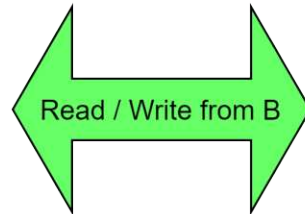
1.4

Table	
PK	<u>B</u>
1	Row 1
2	Row 2



1.4

Table	
PK	<u>B</u>
1	Row 1
2	Row 2



Examples

- Rename Column
- Delete Column

Rename a column

Current

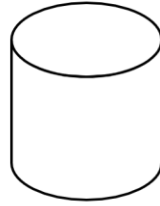
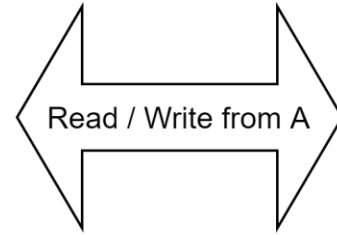


Table	
PK	<u>A</u>
1	Row 1
2	Row 2



R1

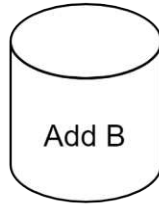
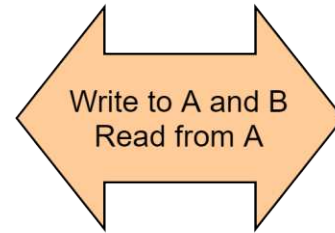


Table		
PK	<u>A</u>	<u>B</u>
1	Row 1	
2	Row 2	



R2

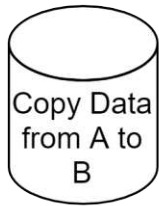
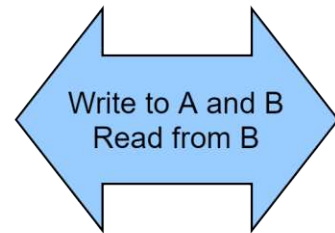


Table		
PK	<u>A</u>	<u>B</u>
1	Row 1	Row 1
2	Row 2	Row 2



Rename a column

R3

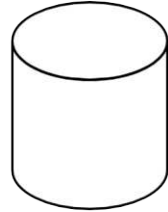
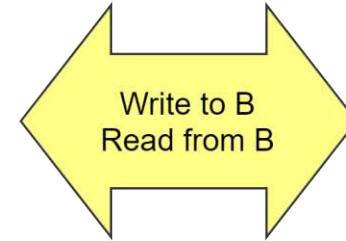


Table		
PK	<u>A</u>	<u>B</u>
1	Row 1	Row 1
2	Row 2	Row 2



R4

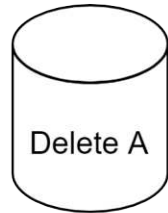
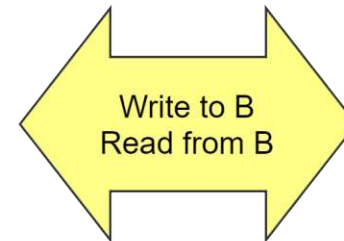


Table	
PK	<u>B</u>
1	Row 1
2	Row 2

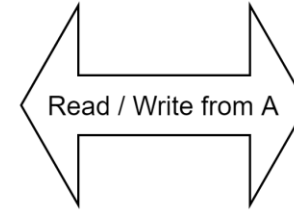


Delete Column

Current



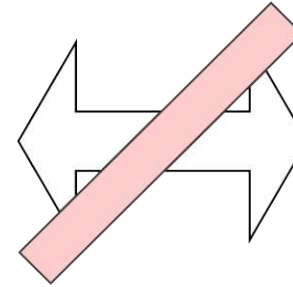
Table	
PK	<u>A</u>
1	Row 1
2	Row 2



R1



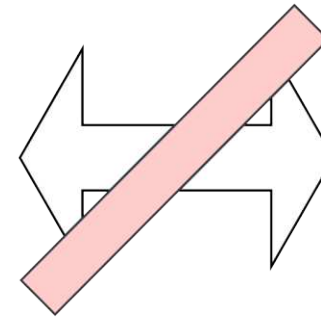
Table	
PK	<u>A</u>
1	Row 1
2	Row 2



R2

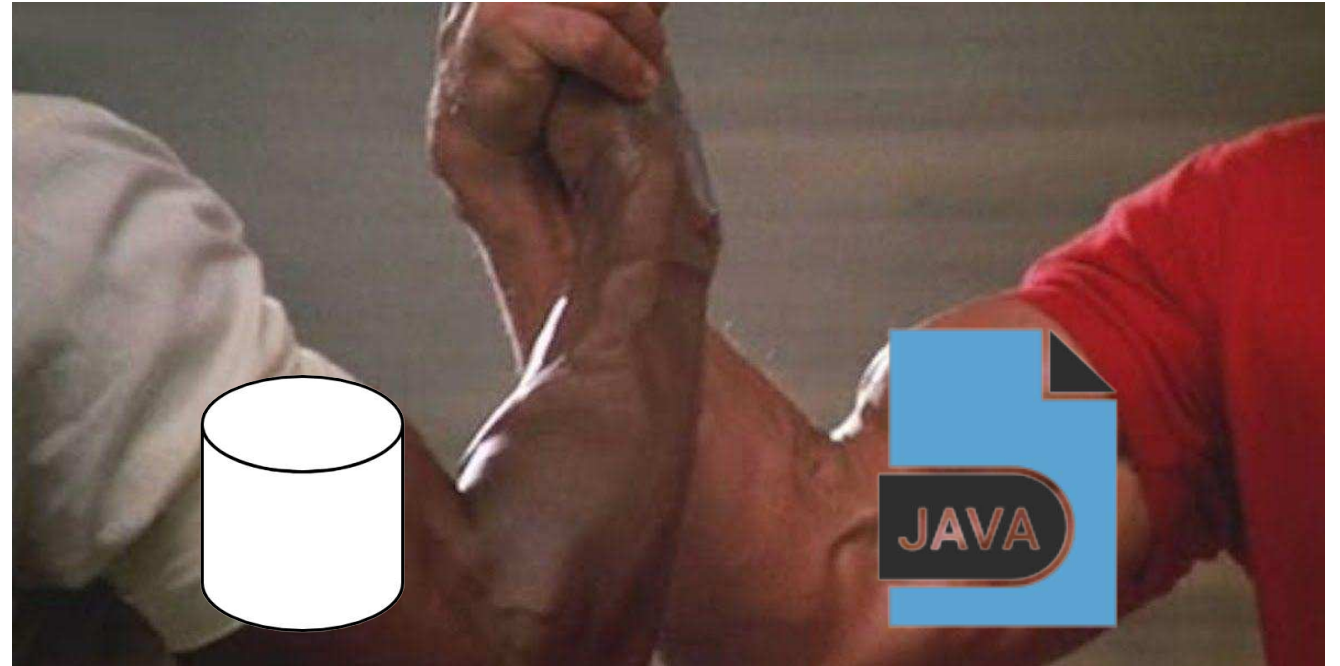


Table	
PK	
1	
2	



Lessons learned from Zero Downtime

- Database and Code have to be in agreement
- Take baby steps
- Make sure your changes are backwards compatible with the code



The image features a blue gradient background. On the right side, there is a circular area with a light beige background. Inside this circle, there are several question marks of varying sizes and orientations, some appearing to be 3D objects. The word "Questions" is written in a black, sans-serif font in the lower right part of the circle, with a horizontal line underneath it.

Questions



Contact

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