


Article

[Murray Oldfield](#) · Sep 30, 2016  1m read

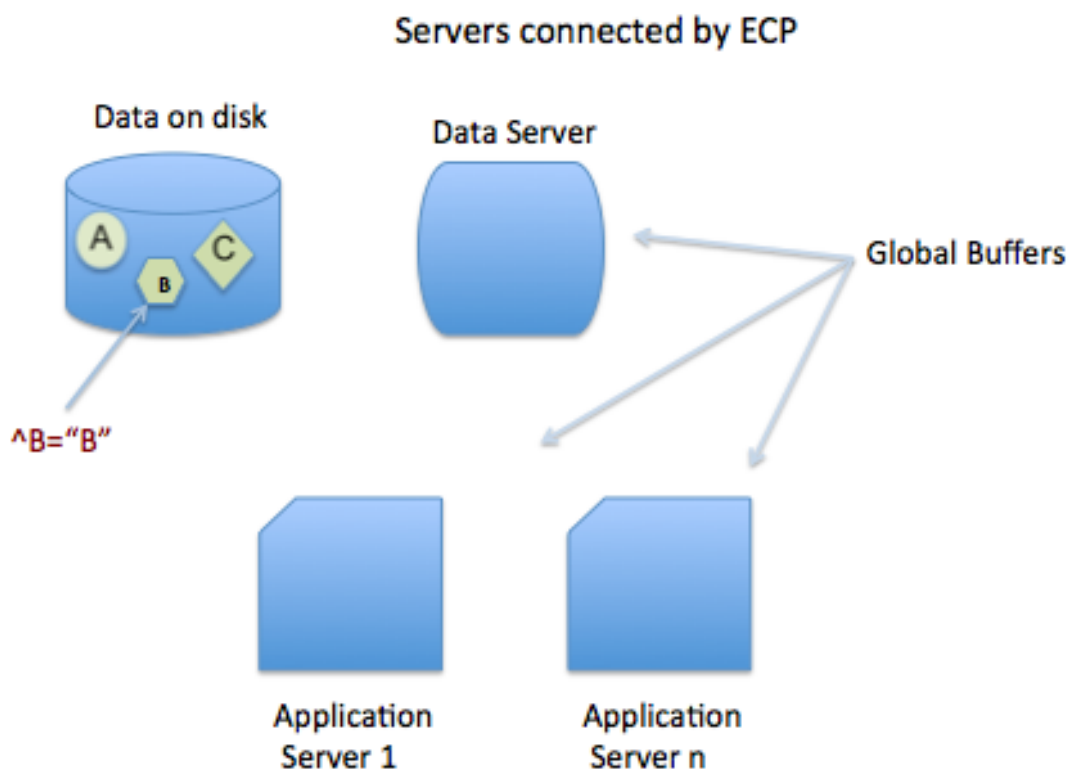
ECP Magic

I saw someone recently refer to ECP as magic. It certainly seems so, and there is a lot of very clever engineering to make it work. But the following sequence of diagrams is a simple view of how data is retrieved and used across a distributed architecture.

For more more on ECP including capacity planning follow this link: [Data Platforms and Performance - Part 7 ECP for performance, scalability and availability](#)

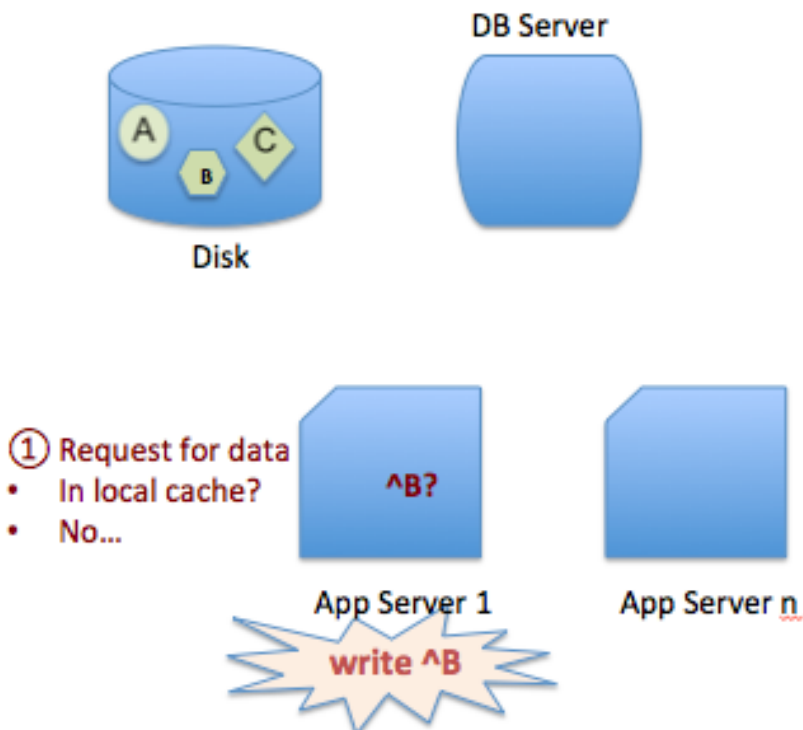
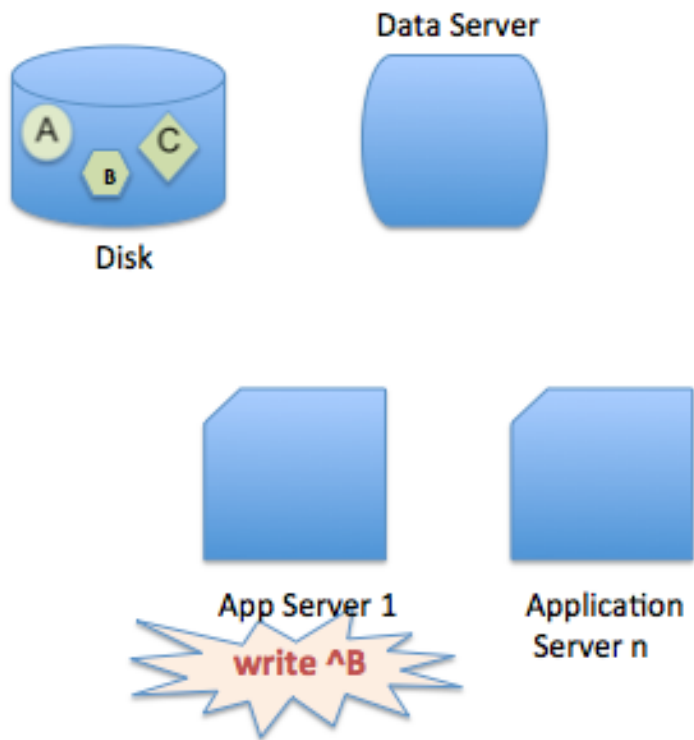
To start

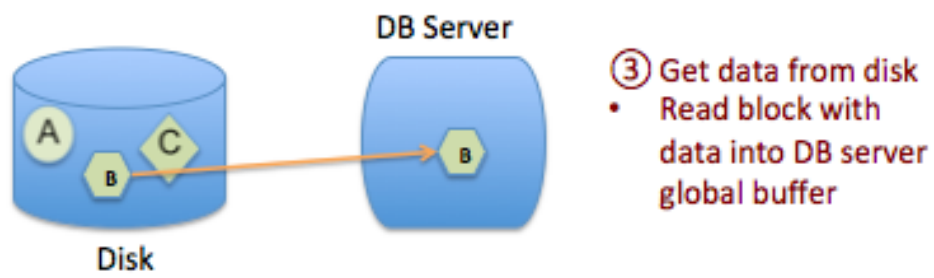
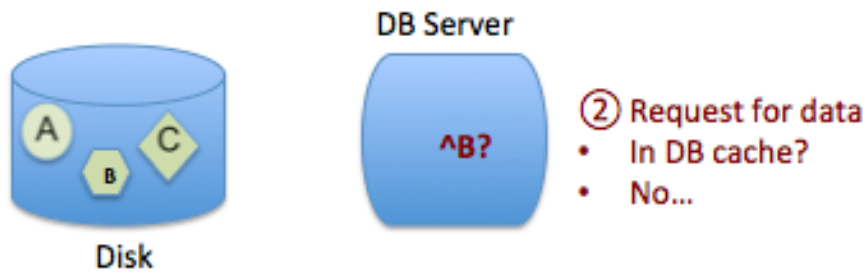
- There are three globals on disk ^A, ^B and ^C.
- Global ^B equals "B"
- There is one Data server and two or more Application servers.
- The diagrams show the cache (global buffers) on each server.

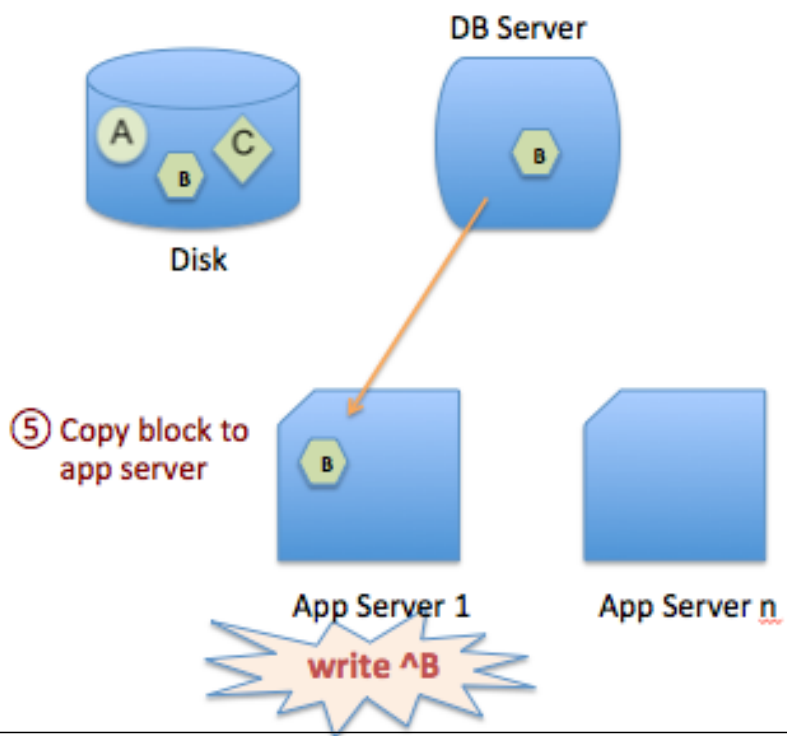
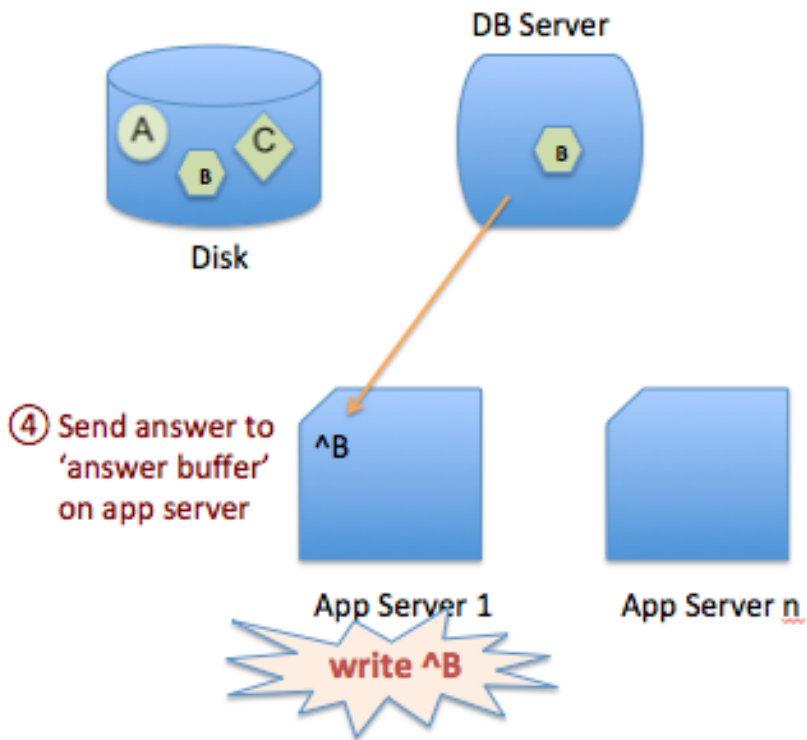


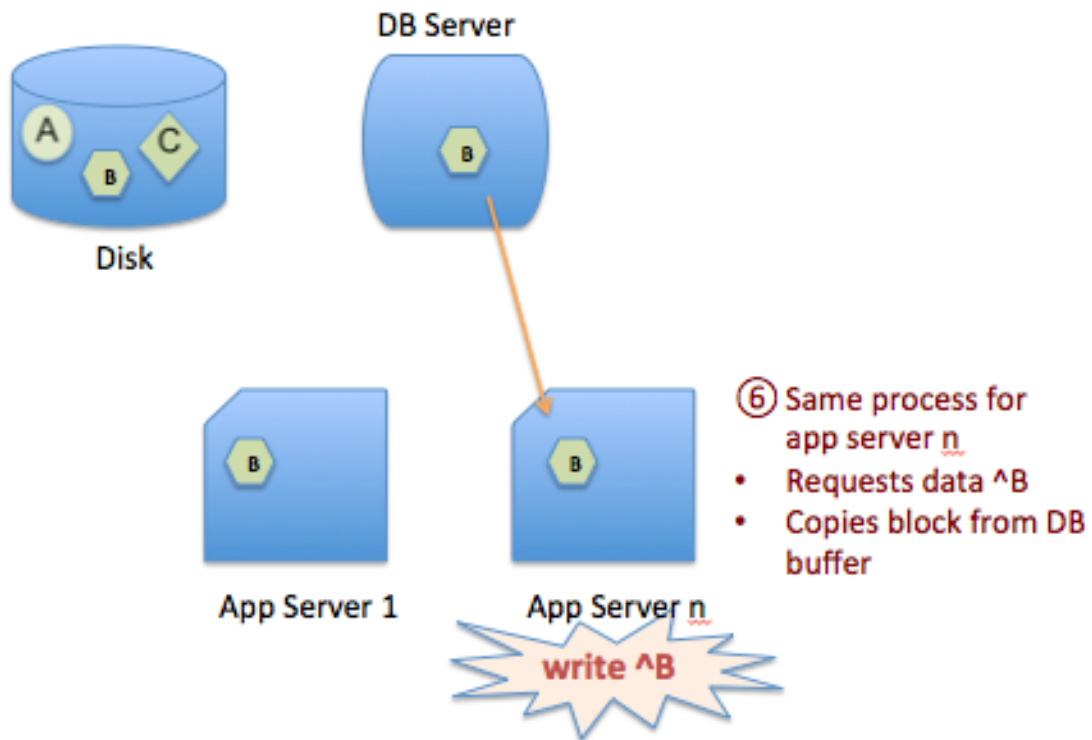
A user on Application server 1 requests the contents of ^B, and the sequence starts, see if you can follow along.

User request from Application server 1:

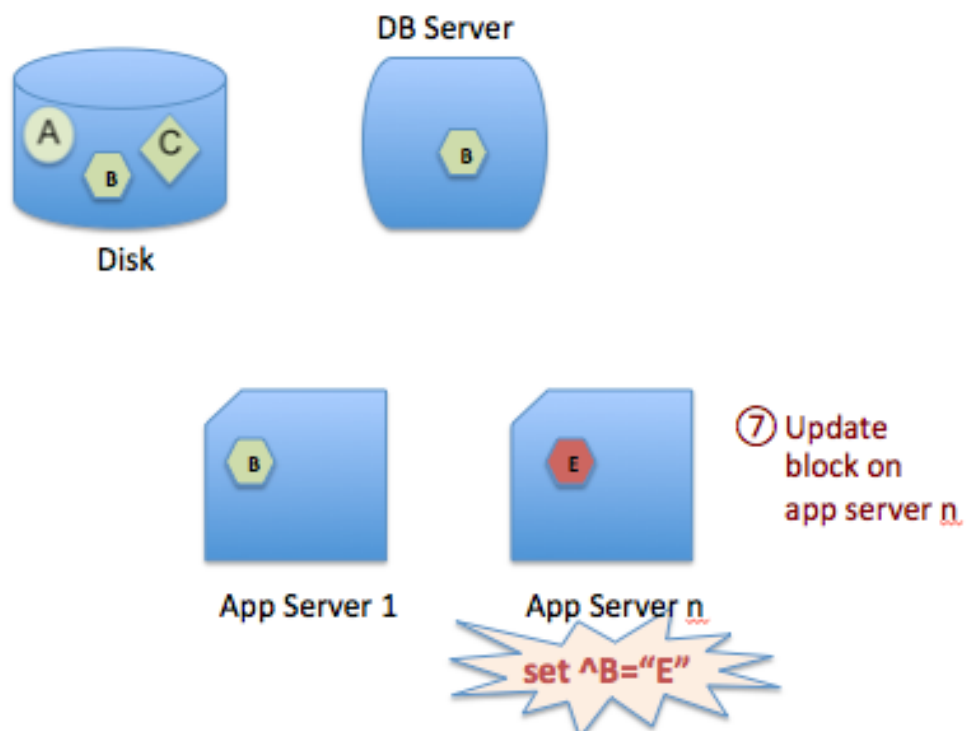


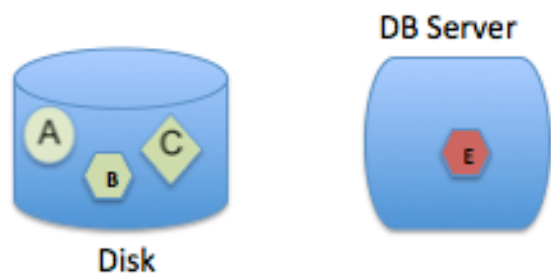
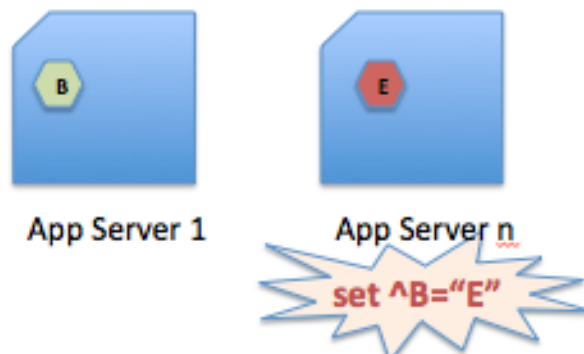
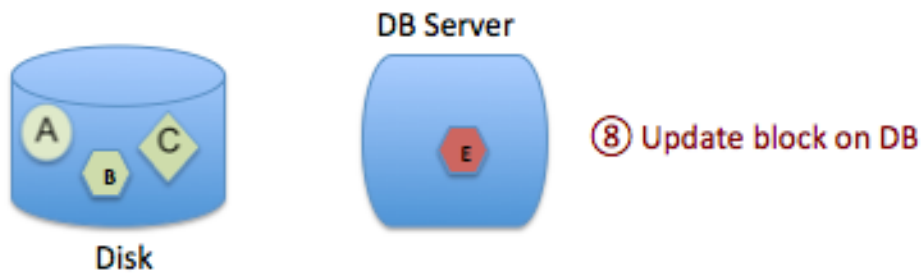




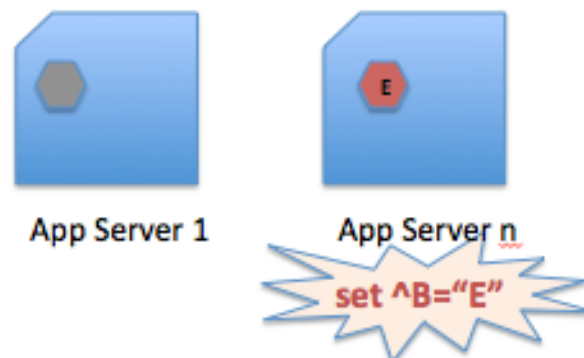


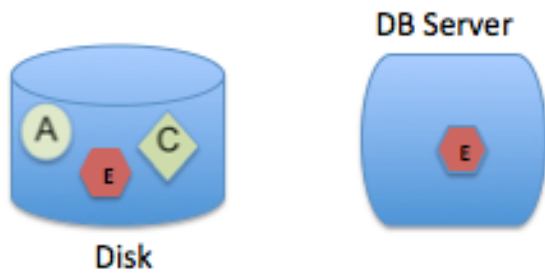
Later...



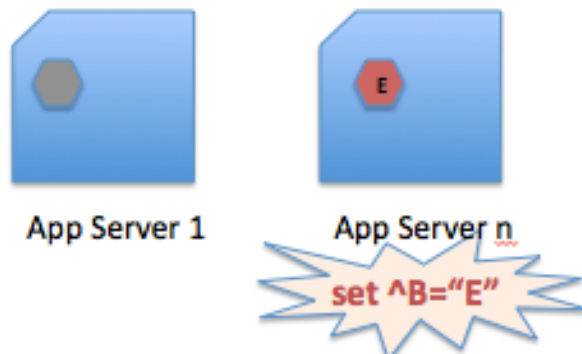


⑨ Invalidate block on App server 1, and any other app servers

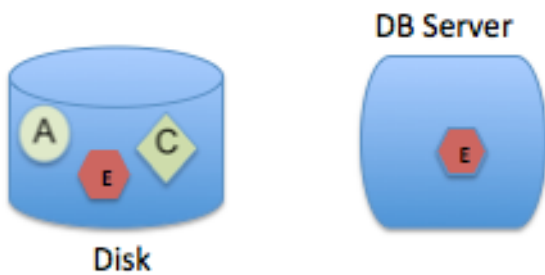




⑩ Update block on Disk

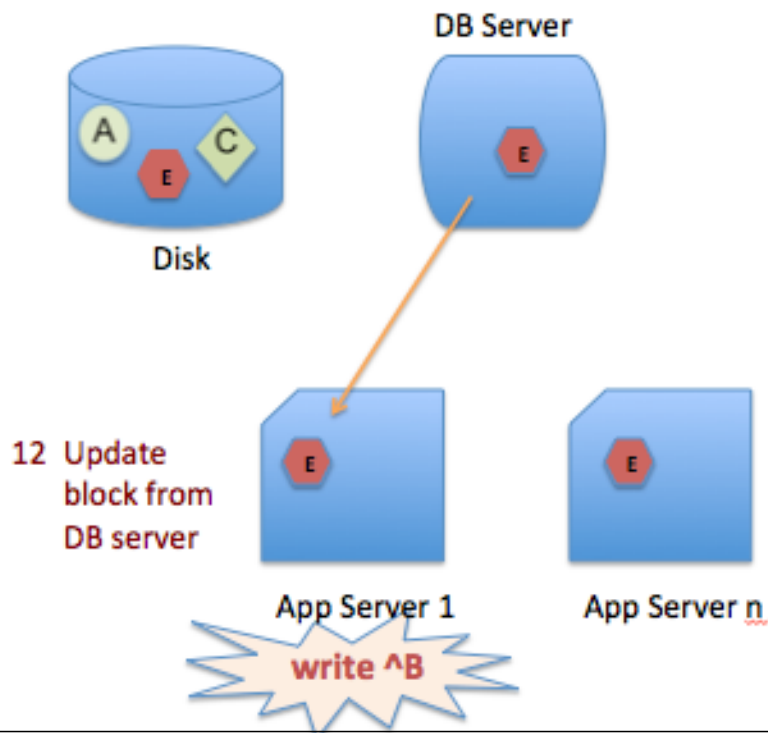


Later...



11 Read requested on app server 1





For more more on ECP including capacity planning follow this link: [Data Platforms and Performance - Part 7 ECP for performance, scalability and availability](#)

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