



## Cloud complexity management (CCM): Dealing with data

If you're often frustrated by the fact that your enterprise's data is becoming very redundant, you're not alone.

Keep in mind that CCM is a larger concept, and dealing with data is a subset of ideas and processes that need to be a part of CCM, as covered in our last blog:

"This means taking the 200 or so databases, which expanded to 300 with the use of cloud computing and looking for common patterns in ways that the data can be better organized. While the data may be stored in different databases, which use different models, with different physical storage, in order to apply CCM you need to consider commonalities with metadata, and actually database elements."

If you're often frustrated due to the fact that your enterprises data is becoming very redundant, you're not alone. Indeed, there is typically no "single source of truth" for data concepts such as customers, inventory, product, etc. Indeed, the use of redundant data often leads to erroneous data which leads to unreliability that the data used by the business is actually correct.

Thus, a first step is to remove as much redundant data as you can before or after you're moving to cloud computing. However, most enterprises are dealing with legacy databases that are too costly to change, thus actually combining the data into single databases and sources of truth, are just not economical, and add to much risk.

Another method is abstraction, which means creating a virtual database that only exists in the memory of the computer, cloud or not, and this virtual database is bound to back-end physical databases. Thus, while one database may contain Cust\_Number and another contains Customer\_No, we would abstract this element into Customer\_Number which would use data from one or the other back-end databases, and sometimes both.

If you've not figured it out yet, this would provide a "single source or truth," not only from the databases existing on premises, or existing in the cloud, both but as well. This means having a simpler and more usable view of the common data, and going from over 300 cloud and non-cloud databases to one or two virtual databases, that could find the right data. This is critical to the success of CCM.

This article originally appeared on [Deloitte's On Cloud blog](#).

### Get in touch:

**David Linthicum**  
**Managing Director**  
**Chief Cloud Strategy Officer**  
Tel: + 1 703 216 6676  
Email: [dlinthicum@deloitte.com](mailto:dlinthicum@deloitte.com)

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