

# Kyvos Design Optimization

Several aspects can impact the performance of your Kyvos cubes. Some problems could be related to raw data, some due to the poor design of the cube and related entities, and others may arise due to inefficient queries. This guide provides information about some of the best practices, which you should consider during the design and development of your Kyvos cubes. The guide also offers tips to fine-tune your existing cube designs in case of performance issues.



In addition to the best practices explained in this guide, refer to the [Kyvos Properties Guide](#) to know more about the advanced properties that you can use for designing cubes to optimize query performance and reduce cube build time.

## Before you begin

As a cube designer, you should be familiar with processes and understand the Kyvos functionality. This document is an add-on to the Kyvos User Guide. Before starting with the best practices, we recommend you go through the [Kyvos User Guide](#) to understand how the tool works.

You must have a thorough understanding of your use case before starting the design process. To keep your design optimized for cube building and querying performance, analyze the following characteristics of your use case, and design the cubes accordingly.

- The cardinality of dimensions and attributes
- The number of dimensions, attributes, and measures
- The number of distinct count measures

## Who should read this guide

The target audiences for the guide are the people working in the systems operation groups, cube designers, or Kyvos administrators responsible for designing and implementing cubes in Kyvos.

After reading these guidelines, you will know the following.

- Best practices and general guidelines for designing cubes in a Kyvos environment
- Best practices and general guidelines for fine-tuning and optimizing cubes
- Advanced properties that you can use for designing cubes to optimize query performance

### Topics in this section:

- [Entity Design Guidelines](#)
- [Tuning and optimizing cubes](#)
- [Sample Query Engine memory calculation](#)
- [Best practices for concurrency configuration](#)
- [Best practices for working on AWS environment](#)
- [Best practices for working on Azure environment](#)
- [Best practices for working on Google Big Query environment](#)
- [Optimizing Query Performance](#)