
**Information technology — Data
centres — Practices for resource-
efficient data centres**

*Technologies de l'information — Centres de données — Pratiques
pour les centres de données économes en ressources*



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Published in Switzerland

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Foreword

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 39, *Sustainability, IT and data centres*.

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Introduction

Data centres are essential to the provision of information technology (IT) services and can play an important role in the conservation of resources. However, they can also consume a considerable amount of resources if mis-managed and thus, it is critical to utilize these resources efficiently.

Resource efficiency in a data centre begins with the location (taking advantage of the external environment) and the building design to minimize energy consumption. The facilities can then implement modular extension or easily extensible space, cooling, and power according to the IT services provided and co-location situation.

Once data centres are constructed and equipped with all the necessary facilities, it is important to collect and monitor operational data. Based on the information obtained, it is possible to determine which elements utilize resources least efficiently and assess how to improve the performance.

The performance of existing facilities can be periodically measured to determine if the original design objectives for resource efficiency are being achieved and allowing performance to be improved by replacement of equipment with better resource-efficiency characteristics.

This document provides information on available options for improving resource efficiency in data centres, with particular emphasis on operational procedures.