

Green Data Center, optimize your energy performance



SII-31 2 Days (14 Hours)

Description

At the end of this training, you will be able to identify the key areas for reducing the electricity consumption of a data center and will be able to implement improvement solutions. This training is part of the PrimeEnergyIT project of the European Commission.

Who is this training for ?

For whom

DSI, Data Centers manager, project manager.

Prerequisites

Aucune

Training objectives

- Optimize different Green IT projects Carry out an inventory of energy and environmental performance Choose the IT solutions appropriate to your needs Select the right infrastructure solutions

Training program

Comprendre les enjeux du Green IT

- The challenge of sustainable development.
- The place of information systems in the issue of sustainable development.
- The different scopes of Green IT.
- Practical work: Identify the different Green IT projects already deployed in your company.

Appréhender les problématiques clés des centres informatiques

- Undersizing of the current fleet.
- Densification and related cooling needs.
- The change of economic model from CAPEX to OPE.

Maîtriser le contexte réglementaire

- European directives impacting computer equipment: EuP, RoHS, WEEE, "batteries".
- The legal obligations of data centers in Europe.
- The legal obligations of data centers in France.
- Voluntary initiatives: code of good conduct, etc...

Mesurer pour identifier les domaines de progrès

- With what tools (indicators, methodology, etc.
-) to take stock of the situation?
- The main performance indicators energy and environmental aspects of data centers: PUE, CUE, - WUE, DCcE, etc...
- Physical measurement.
- Practical work: Calculate the PUE of a computer center.

Les solutions IT

- Implement application governance.
- Manage the data lifecycle.
- Hierarchical data storage, deduplication.
- Consolidate and virtualize equipment.
- Choose equipment adapted to energy efficiency issues.
- Ecolabels and technical standards for selecting equipment.
- Study of case: Analysis of several materials using ecolabels and appropriate standards.

Les solutions liées à l'infrastructure

- The impact of the availability level (third party) on energy needs.
- Modular architecture of the POD type.
- Spatial organization of equipment in the data center: hot aisle, cold aisle.
- Precision cooling.
- Free cooling, water cooling.
- Feedback.
- Study feedback from companies that have already implemented these solutions.