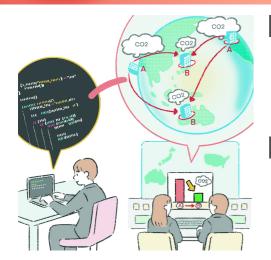
Green software technologies for reducing GHG emissions

IOWN Now

Next-Generation Computing Infrastructure



Background

Demand for decarbonization through cooperation in the supply chain and the calculation and disclosure of GHG emissions for this purpose are accelerating. In the software field, specific efforts to reduce GHG emissions have not been made because there are no standard GHG emission calculation rules.

Summary

As software GHG emission calculation and reduction technologies, we are working to standardize GHG emission calculation methods and develop calculation tools at the development phase, and develop technologies for efficient use of electricity to reduce GHG emissions at the operation phase.

Green software technologies for reducing GHG emissions

Establishment of rules for calculating GHG emissions

Through discussions in the support program* of the METI, establishing rules for calculating GHG emissions in software development.

*"The Ministry of Economy, Trade and Industry 2023 Support Project forFormulating Rules for Calculating Carbon Footprint by Product to Promote GX"

> Calculating GHG emissions

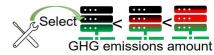
Visualize and analyze GHG emissions

- Collect power consumption of ICT equipment automatically
- Visualize GHG emissions using collected power consumption



Making plan for reducing GHG emissions

GHG emissions reduction by intelligent power use Reducing GHG emissions during software execution by automatically selecting regions with low carbon intensity as a software execution environment.



Reducing GHG emissions from software execution

Software Developer

Operations Manager

Business Owner

End User

Features

- Establishment of industry-wide rules for calculating CO₂ emissions at the software development phase
- Technology to visualize and analyze GHG emissions during software development by automatically collecting power consumption of ICT equipment
- Technology to reduce GHG emissions during software execution by automatically selecting energy-efficient execution environments based on information such as use of renewable energy

Future_benefits

Software development and operation with environmental performance as a business value will realize supply chain carbon neutrality by starting in the software industry.

Exhibiting Company

NIPPON TELEGRAPH AND TELEPHONE CORPORATION, NTT DATA Group Corporation

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