

IPv6 Heat Island Countermeasure System

The heat islanding of Tokyo is progressing steadily. Due to the spread of air conditioners and the development of oceanfronts which cause inadequate sea breeze, the temperature of the metropolitan area is expected to increase. However, it is thought that there is little we can do with a city-size like this. I believe this is when individuals can use the mechanism of **IPv6** as a countermeasure towards heat islanding to create significant results.

1 IPv6 Sprinkler

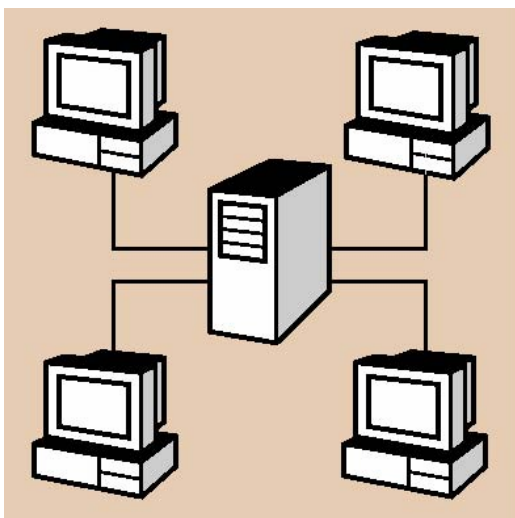


The yard and upper portion of a building is cooled by sprinkling water. The effectiveness of sprinkling water to cool a city is demonstrated by pages such as UCHIMIZU DAISAKUSEN.

(<http://www.uchimizu.jp/>)
There are many places in the city where sprinklers can be placed, such as the yard and upper portion of a building. Also a normal sprinkler can

equip IPv6 to dynamically control a specific sprinkler, or remote control, or advanced sprinkling can be possible. By equipping this sprinkler with a GPS unit, thermometer, hygrometer, and an anemometer, as in No.2 of this explanation, data can be sent to the IPv6 Weather Grid. Even if only one is installed it will still have sufficient effect in cooling the city down.

2 IPv6 Weather Grid



Data of the GPS, temperature, humidity and direction of wind is collected by the IPv6 sprinkler from above and then sent to a computer. The computer does not use this information alone, but using the security

function and the vast amount of addresses of IPv6, it communicates with other computers that have IPv6 sprinklers connected, and operate as a large grid. Weather data is analyzed and the watering timing and amount is fed back to the IPv6 sprinkler based on data collected.

Feature 1 It could function as a normal sprinkler. Even if it is not connected, it still serves many uses.

Feature 2 By just using the IPv6 thermometer, hygrometer, and anemometer, it could act as a weather observation system.

Feature 3 The more sprinklers attached, it synergizes and work a lot more effectively. For example, by spraying water at a certain place, it will generate wind, and air from the sea could cool the city down. Or if calculating speed increases, it may be able to moderate the chaos-like behavior of the weather. This calculation can be done by the control computer of the sprinkler alone.