BREVET DE TECHNICIEN SUPÉRIEUR

SERVICES INFORMATIQUES

AUX ORGANISATIONS

SESSION 2016

SUJET

ÉPREUVE E1 - CULTURE ET COMMUNICATION
Sous-épreuve U12 - EXPRESSION ET COMMUNICATION EN LANGUE ANGLAISE

Durée : 2 heures **Coefficient : 1**

Matériel autorisé : DICTIONNAIRE UNILINGUE

CALCULATRICE NON AUTORISÉE POUR CETTE ÉPREUVE

Dès que le sujet vous est remis, assurez-vous qu'il est complet.
Le sujet comporte 3 pages, numérotées de 1 à 3.

THE LANGUAGE OF THE INTERNET OF THINGS

More and more devices are becoming connected, but will they speak the same language?

There was a time, not long ago, when access to the internet could be gained only through a computer. Now people can get to it using phones, tablets and some games consoles. Increasingly, other devices are becoming internet-linked too, as connectivity is extended to everyday objects such as televisions, radios, watches and cars.

The "internet of things" promises a technological revolution, but for it to work well these things need to speak the same language. Industry, however, tends to adopt common standards - if at all - only after jostling between rival producers with competing systems. It was so for trains, televisions, video recorders, mobile phones and the internet itself. And it will be the same for connected devices.

A number of industry groups are trying to standardise how things connect and communicate. One of the most prominent is the AllSeen Alliance, a consortium of firms from such diverse worlds as semiconductors, white goods, consumer electronics and retail. Its biggest members include Haier, LG, Panasonic, Qualcomm and Microsoft. Their proposed solution is AllJoyn, a free piece of software created by Qualcomm but handed to the Alliance for its members to develop further.

AllJoyn is designed to sit inside devices and, regardless of manufacturer or operating system, mediate direct communications over wireless links such as Wi-Fi or Bluetooth. The idea is that objects broadcast to each other descriptions of what they can do, in a common language.

A television might announce that it can display notifications, a speaker that it plays audio files or a clock that it can execute commands at given times. A newly released smartwatch, for example, should then have no trouble communicating with these other devices even though they have not been previously acquainted or programmed to work with each other. In the case of an air-conditioning unit, say, the smartwatch could control the airflow and the air conditioner could send temperature information to the watch's screen.

Once more things connect, many scenarios present themselves. Connected smoke alarms could enlist nearby light bulbs to flash and speakers to sound an alert. A warning about the smoke's location could appear on a television. And door locks could be automatically opened. Many other not-yet-thought-of applications will arise, says Liat Ben-Zur, chairwoman of the AllSeen Alliance. "Unexpected capabilities pop up when devices speak the same language," she says.

Simple as it sounds, the challenge remains considerable. The immediate problem is accommodating the great diversity of connected things, varying not just in their thousands of different uses, but also in their sophistication. Establishing standards flexible enough to embrace all devices is a daunting task.

So is trying to ensure forward compatibility. Innovation in connected devices is rapid, but futureproofing is difficult because no one knows where the technology and its myriad applications will lead. People also have to get used to smart devices and installing regular software updates even, perhaps, for ovens.

The real problem may turn out to be not a lack of standards, but too many - and disagreement over which initiative to pursue. The AllSeen Alliance is just one of many groups working on solutions. AT&T, Cisco, GE, IBM and Intel have helped form another group called the Industrial Internet Consortium to "define common architectures" for smart objects. Other organisations include the IPSO Alliance, which is promoting the use of the Internet Protocol, which eventually standardised the way that data could flow across different types of network; the Open Interconnect Consortium (Broadcom, Dell, Samsung and others); and the Institute of Electronics Engineers, which is working - perhaps ambitiously - to build consensus on standards.

*The Economist***,** September 6, 2014

CONSIGNES

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Vous travaillez pour une société de conseil en informatique qui intervient à l'international. Vous venez de recevoir un courriel de Steve Roger, qui dirige une société d'import-export. Nombre de ses employés utilisent déjà des appareils connectés au travail. Il souhaiterait connaître votre avis sur les avantages et les inconvénients de l'utilisation de ces objets connectés dans le cadre professionnel.

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