### **NIST DELIVERS ACCURATE TIME TO YOUR COMPUTER-***and Billions Around the World*

### **HOW IT WORKS**

The Internet Time Service (ITS) at the National Institute of Standards and Technology (NIST) enables you to set your computer clock to the official NIST U.S. time with an accuracy that's measured in thousandths of a second.



ITS servers obtain their data from NIST's time signal, based on a network of atomic clocks at NIST and around the world, and distributed freely to the public.

### **NIST** 10:37:15.012.

From showing the correct time on your outgoing email messages to ensuring accurate securities transactions with moment-to-moment price changes, the ITS helps to enable many aspects of modern life.



#### **NIST STATS**

20 Number of Internet Time Service servers run by NIST.



# 16 billion\*

Number of time requests the servers handle every day "latest number available as of January 2016



Number of servers studied for the new paper published in the NIST Journal of Research.

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### 71%

Registered Autonomous Systems (i.e., independently operated networks on the Internet) that requested time information.



## 98%

Countries/regions in the international GeoIP database (or 244 out of 250) that requested time information.

About half of the usage was in the United States with China being the next biggest user. Antarctica was among the few countries/ regions that did not request information.

#### 25%

Service traffic handled by the two servers studied.



## 316 million

Number of unique Internet Protocol (IPv4) addresses requesting time from two of the servers during a four-week period. This represents at least 8.5% of the entire Internet.

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National Institute of Standards and Technology U.S. Department of Commerce

#### www.nist.gov