

## The last batches of IPv4 internet addresses will be distributed Thursday

February 1 2011, By PETER SVENSSON, AP Technology Writer

(AP) -- The spread of Internet use in Asia and the proliferation of Internet-connected phones worldwide are causing the Internet to run out of numerical addresses, which act as "phone numbers" to ensure that surfers reach websites and e-mails find their destination.

The top-level authority that governs such addresses will distribute the last batches on Thursday, two people with knowledge of the situation told The Associated Press. They spoke on condition of anonymity because a formal announcement wasn't planned until Thursday.

That doesn't mean consumers will suddenly find websites unreachable, though. And if everything goes according to plan, Internet users won't even notice.

"It will just be 'business as usual' if everyone gets their job done," said John Curran, CEO of the American Registry for Internet Numbers, or ARIN, one of five regional groups that dole out such addresses. ARIN covers the U.S., Canada and the Caribbean.

The Internet Assigned Numbers Authority, the top-level administrator of the system, has called a press conference in Miami on Thursday. One person said its last five "blocks" of Internet Protocol, or IP, addresses will be distributed then. These blocks, each with 16.8 million addresses, will be distributed to the regional registries. That means the regional groups will have IP addresses to distribute further to Internet service providers, websites and others before running out. Curran expects to



deplete his allotment in six to nine months.

The current Internet address system, Internet Protocol version 4, has been in place since the 1980s. It allows for a theoretical maximum of 4.3 billion addresses in use, far beyond what was thought necessary for what was then mainly a network for academic use.

Engineers have known for years that the pool of <u>these IP addresses</u> <u>would one day run out</u>. Websites and service providers have been experimenting with a new technology (<u>IPv6</u>) that allows for many more addresses - an infinite number, for all practical purposes. But many have been slow to do so because of a lack of immediate benefits. The exhaustion of IP addresses at the top level puts pressure on them to move more quickly.

The new system is called Internet Protocol version 6, or IPv6. Curran said only about 2 percent of websites support it. However, many of those are the most-visited sites on the Internet, including Google and Facebook. He expects smaller sites to scramble for IPv6 addresses now.

As Internet service providers run out of IPv4 addresses, they'll have to give subscribers IPv6 addresses. The challenge lies in connecting them to websites that have only IPv4 addresses. In essence, IPv4 and IPv6 are different "languages." Several "translation" technologies are available, but they haven't been tested on a large scale, Curran said. That could lead to problems reaching some websites, or slow surfing.

"We're estimating how these boxes will work, but we haven't seen one deployed with tens of thousands of customers on it yet," Curran said.

The "end game" - the distribution of the last five blocks - was triggered by the distribution of two of the last seven blocks on Tuesday. They went to the Asia Pacific Network Information Centre, the regional registry for



East Asia (including India), Australia and the Pacific islands.

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