Supplemental Reading forIPv4 Address Exhaustion

The IANA (**Internet Assigned Numbers Authority**) has been in charge of distributing IP addresses since 1988. Since that time, the internet has expanded at an incredible rate! The 4.2 billion possible IPv4 addresses have almost run out, as it's long been predicted.

For some time now, the IANA has primarily been responsible for assigning address blocks to the five regional internet registries or RIRs. The five RIRs are:

- **AFRINIC**, which serves the continent of Africa
- **ARIN**, which serves the United States, Canada and parts of the Caribbean
- **APNIC**, which is responsible for most of Asia, Australia and New Zealand and Pacific Island nations
- **LACNIC**, which covers Central and South America and any parts of the Caribbean not covered by ARIN
- **RIPE**, which serves Europe, Russia,the Middle East, and portions of Central Asia

These five RIRs have been responsible for assigning IP address blocks to organizations within their geographic areas and most have already run out. The IANA assigned the last unallocated /8 network blocks to various RIRs on February 3rd, 2011. Then on April 2011, APNIC reached its final /8 of addresses. RIPE was next, in September of 2012. LACNIC reached its final /10 in June 2014. ARIN exhausted its list of free IPv4 addresses in September 2015. Only AFRINIC has some IPs left.

Wikipedia has a great article all about IPv4 exhaustion and the timelines involved.