

# Is 2016 Half Empty or Half Full?



Peter Silva, 2016-19-07

*Updating passwords is a huge trend in 2016*



With 2016 crossing the half way point, let's take a look at some technology trends thus far.

**Breaches:** Well, many databases are half empty due to the continued rash of intrusions while the crooks are half full with our personal information. According to the [Identity Theft Resource Center \(ITRC\)](#), there have been 522 breaches thus far in 2016 exposing almost 13,000,000 records. Many are health care providers as our medical information is becoming the gold mine of stolen info. Not really surprising since the health care wearable market is [set to explode](#) in the coming years. Many of those wearables will be transmitting our health data back to providers. There were also a bunch of very recognizable names getting blasted in the media: [IRS](#), [Snapchat](#), [Wendy's](#) and [LinkedIn](#). And the best advice we got? Don't use the same password across multiple sites. Updating passwords is a huge trend in 2016.

**Cloud Computing:** [According to IDC](#), public cloud IaaS revenues are on pace to more than triple by 2020. From \$12.6 billion in 2015 to \$43.6 billion in 2020. The public cloud IaaS market grew 51% in 2015 but will slightly slow after 2017 as enterprises get past the wonder and move more towards cloud optimization rather than simply testing the waters. [IDC also noted](#) that four out of five IT organizations will be committed to hybrid architectures by 2018. While [hybrid is the new normal](#) remember, [The Cloud is Still just a Datacenter Somewhere](#). Cloud seems to be more than half full and this comes at a time when [ISO compliance in the cloud](#) is becoming even more important.

**DNS:** [I've said it before and I'll say it again](#), DNS is one of the most important components of a functioning internet. With that, it presents unique challenges to organizations. Recently, Infoblox released its [Q1 2016 Security Assessment Report](#) and off the bat said, 'In the first quarter of 2016, 519 files capturing DNS traffic were uploaded by 235 customers and prospects for security assessments by Infoblox. The results: 83% of all files uploaded showed evidence of suspicious activity (429 files).' They list the specific threats from botnets to protocol anomalies to Zeus and DDoS. A 2014 vulnerability, [Heartbleed](#), still appears around 11% of the time. [DevOps](#) is even in the DNS game. In half full news, [VeriSign filed](#) two patent applications describing the use of various DNS components to manage IoT devices. One is for systems and methods for establishing ownership and delegation of IoT devices using DNS services and the other is for systems and methods for registering, managing, and communicating with IoT devices using DNS processes. Find that half full smart mug...by name!

**IoT:** What can I say? The cup runneth over. Wearables are expected to [close in on 215 million units](#) shipped by 2020 with 102 million this year alone. I think that number is conservative with smart eyewear, watches and clothing grabbing consumer's attention. Then there's the whole realm of industrial solutions like smart tractors, HVAC systems and other sensors tied to smart offices, factories and cities. In fact, utilities are among the largest IoT spenders and will be the third-largest industry by expenditure in IoT products and services. Over \$69 billion has already been spent worldwide, according to the [IDC Energy Insights/Ericsson report](#). And we haven't even touched on all the smart appliances, robots and media devices finding spots our homes. Get ready for [Big Data regulations](#) as more of our personal (and bodily) data gets pushed to the cloud. And we're talking [a lot of data](#).

**Mobile:** We are mobile, our devices are mobile and the applications we access are mobile. Mobility, in all its iterations, is a huge enabler and concern for enterprises and it'll only get worse as we start wearing our connected clothing to the office. [The Digital Dress Code](#) has emerged. With [5G on the way](#), mobile is certainly half full and there is no emptying it now.

Of course, [F5](#) has solutions to address many of these challenges whether you're boiling over or bone dry. Our [security solutions](#), including [Silverline](#), can protect against malicious attacks; no matter the cloud - private, public or hybrid - our [Cloud solutions](#) can get you there and back; [BIG-IP DNS](#), particularly [DNS Express](#), can handle the incredible name request boom as more 'things' get connected; and speaking of things, [your data center](#) will need to be agile enough to handle [all the nouns requesting access](#); and check out how [TCP Fast Open](#) can optimize your mobile communications.



That's what I got so far and I'm sure 2016's second half will bring more amazement, questions and wonders. We'll do our year-end reviews and predictions for 2017 as we all lament, where did the [Year of the Monkey](#) go?

There's that old notion that if you see a glass half full, you're an optimist and if you see it half empty you are a pessimist. I think you need to understand what state the glass itself was before the question. Was it empty and filled half way or was it full and poured out? There's your answer!

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