

## QTS Peering and Data Exchange

There can be little debate the internet is a central part of life for individuals as well as businesses in the 21st century. In the last twenty years, Global internet users have gone from 248 million to 4.5 billion. Currently there are over 312 million internet users in North America. In those same twenty years the world's largest companies by market cap have undergone a dramatic transformation. In 1999 the top ten largest companies in the world included only one Hyperscale company (Microsoft). In 2019 that number has risen to seven of the top ten. Over the same time period digital advertising spending has overtaken print advertising spending, streaming subscriptions have surpassed cable subscriptions, digital media has replaced print media, online spending as a share of household spending has surpassed general merchandise sales of the same share and online gaming has grown into a \$100 billion+ industry. The digital shift has moved from fad to permanence and will continue for many more industries as time progresses.

As businesses embrace the digital shift, their revenue profiles have also evolved and a higher percentage of revenue is generated through online means. This shift means companies are exposed to greater risk. According to Gartner and a recent ITIC survey, 98% of organizations say a single hour of downtime costs over \$100,000, and 33% of those enterprises reported that one hour of downtime costs their firms \$1–5 million. These figures have been growing in recent years and will continue to grow. This shift has been achieved by an incredible amount of transformation in infrastructure including software, servers, routers, switches, fiber networks (terrestrial and subsea), cell towers and data center technology.

However, there is one area that has suffered from a lack of transformation, and that is how and where internet networks exchange traffic. Very few internet users are on the same network where their desired content "lives". As such, there is a critically important role for the intermediary who enables internet networks and content networks to exchange traffic – the user and the content to connect. There are roughly 10 locations in North America where all of these networks exchange traffic. This is the same as it was 20 years ago – and the risk associated with this lack of transformation is steadily increasing.



## This Presents Two Major Risks:

From a technical perspective, internet networks attempting to exchange traffic with each other or with content networks like Facebook, YouTube and Twitter are at a serious risk if any of these sites have a service degradation or outage, as there is no survivability. When an outage occurs, whether it's a configuration issue, fiber cut, construction or force of nature, businesses are going to have a series of problems. These will include lost revenue, SLA penalties, negative customer experience, brand reputation damage and employee productivity.

From a commercial perspective, this concentration of infrastructure inherently results in a lack of competition in the marketplace for internet and content suppliers. Buyers are held hostage in price negotiations and renewal discussions. Without competition, enterprises are at the mercy of the provider who owns that building. Prices and policies for entrance facilities, cross connects and riser fees are at the whim of the provider who can change either, or both, at any time. This leaves the customer no choice but to accept the changes because competition has not been introduced to combat this state of affairs.

## QTS Position on Peering and Data Exchange

At QTS, we believe it is imperative to transform in this area. Specifically, we believe that we must help the industry proliferate the number of buildings where internet and content networks can exchange traffic (addresses the technical issue) and do so in a neutral and open way (addresses the commercial issue). Internet interconnections are more than simply getting traffic to its end destination. Our open policy on Internet networks, internet exchanges and content networks allows for the easy movement of traffic between networks with a commercial structure that is friendly to both. This provides a benefit to all QTS customers through direct access to the proper networks within our data centers and to network providers that want to exchange traffic with each other, whether serving a QTS customer or not.

## QTS is a Proud Member of the IEIC

Dedicated to stimulate transformation, regional economies and internet infrastructure growth globally, the IEIC supports secure and resilient network design to deemphasize the heavy reliance of the current concentrated, congested peering points. The IEIC partners with communities globally to create new Internet Exchange Points to provide diversity and redundancy such that any single failure cannot adversely affect the internet and the businesses and people who rely on it.

