Don't Let IPv4 Exhaustion Stall Your Growth

Regional and rural broadband is set to boom.
So is the cost to buy IPv4 address space.

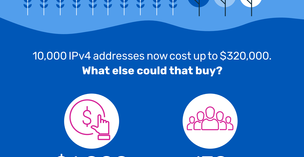
Closing the digital divide will bring millions—or billions—of **new subscribers into the market**

42M
U.S. consumers **currently lack** broadband internet service[1]

1.9B
people in Asia-Pacific **lack internet connectivity**[2]

41%
of E.U. households **aren't covered** by next-generation access technology[3]

Government-led
initiatives are **pumping billions** into rural broadband programs



That's a lot of new connectivity—**at a potentially crushing price**

Free
IPv4 addresses **fully allocated by the RIR**—leading to IPv4 exhaustion

$32
is the cost of each IPv4 address now, **and prices rise every year**

15%
That could add 15% to annual OpEx per location

And by 2024, each IPv4 address may cost **$61**

10,000 IPv4 addresses now cost up to $320,000. **What else could that buy?**

$1,800
CapEx for a complete FTTH location (distribution, optical networking, feeder, line, control cards, etc.)

178
additional FTTH locations — **how many more customers can you serve?**

What about **IPv6**?

Conversion of existing IPv4 infrastructure is a **costly long-term project**

IPv6 and IPv4 will **co-exist for years**

Less than 20% of websites currently use IPv6[4]

Almost 2/3 of Google queries access the internet **using IPv4**

As long as customers want IPv4 content, **you have to support IPv4 connectivity**

The **CGNAT option**

10,000
new subscribers could only need **150 IPv4 addresses**

Share
existing IPv4 addresses to 64+ subscribers to **solve IPv4 exhaustion**

Reduce
IPv4 acquisition costs by **80%**

Gain
time for more **gradual IPv6 adoption** side-by-side with continued IPv4

Redirect
IPv4 acquisition costs to **business growth**

Sell
unused IPv4 addresses to capture **additional revenue**

Invest for **continuous migration**

Meet both short-term IPv4 needs and long-term IPv6 needs through a **lifecycle approach to migration**

Use CGNAT to solve IPv4 exhaustion

Apply **advanced features** for transition between IPv4 and IPv6

Maintain a **seamless & secure subscriber experience throughout lifecycle**

Capture the regional and rural broadband opportunity

Learn more about cost-effective IPv4 connectivity in the A10 Networks' report, *"Making Cents of IPv4 – Cost and Capacity Considerations for Regional and Rural Service Providers."*

Download Report

[1] BroadbandNow Research, "BroadbandNow Estimates Availability for all 50 States," 2021
[2] European Commission, "Digital Economy and Society Index (DESI) 2020: Connectivity," 2020
[3] DataReportal, "Digital 2020: Global Digital Overview Report," 2020
[4] W4 Techs Web Technology Survey, July 15, 2021
[5] Google IPv6 Statistics, July 15, 2021

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