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The economic impact of broadband: Evidence from OECD countries☆

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ABSTRACT

Information networks have a significant impact on modern economies. This is reflected by their adoption and use across countries along with the increasing quality of the networks. As a result, the impacts on the economy are driven both by the level of adoption and the quality of the connections. Looking at the OECD countries between 2002 and 2016, I find a consistent effect of broadband adoption on national economic output with diminishing returns to scale. I also find that speed is a moderator of these effects and identify a speed threshold, beyond which further quality increases are deemed unproductive. This speed-threshold increases over time as more applications and skills become available. The measurement of adoption levels and speeds helps formulate a policy tool that guides the development of new communications networks. It also shapes the key priorities in terms of their coverage and quality trade-offs.

1. Introduction

As an enabler of significant socio-economic activities, broadband networks have been central in the policy debate for more than a decade. In this context the gradual improvements in technology, the use of common protocols and communication standards, the introduction of competition in former monopolies and the significant price reductions in access and equipment have fueled the adoption of digital communications. This progress helped increase the geographical coverage of broadband services, the provision of higher speeds and finally led to the wider adoption of these services turning network access into a legal right for all citizens in the UK.[1]

Broadband networks are an essential enabling infrastructure in modern knowledge-based economies. Among other general-purpose infrastructures, broadband enables the digitization of adopting sectors including energy, health, education, manufacturing and financial services leading to easier and more efficient information exchange and processing. Given their heterogeneous demand across regions and individuals the policy maker is often faced with the trade-off between: further investments in quality or coverage or the provision of telecommunications services on competitive market terms. These two options may either risk increasing prices for the expanded or faster services or, perhaps, result in providing socially sub-optimal broadband access.

The aim of this paper is to measure the economic impact of broadband[2] using an econometric method that accounts for the dual nature of the underlying effect: the economic impact as a result of increased broadband use and the effects that higher incomes have on broadband adoption. There are several ways to model this link ranging from experimental designs with treatment variations to growth accounting using macroeconomic data. In the absence of microeconomic data, a standard approach involves the use of different stages in the estimation of the effects. In this paper I use the structural framework proposed by Röller and Waverman (2001) and Koutroumpis (2009). This model measures the direct and reverse effect of broadband use on the local economy combining an aggregate production function with a micro-model of supply, demand and output. This report replicates the model used in Koutroumpis (2009) and updates its findings using an OECD panel of countries for the period 2002 to 2016.

I find that broadband adoption increased GDP by 4.34% in the OECD area for the period 2002–2016 when fixed broadband connections grew from 3.8 to 31.3 per 100 people. Similarly the broadband speeds in the OECD region increased from a 0.75 Mbps speed in 2002 into 12.85 Mbps in 2016. The GDP change from this speed increase was

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[1] http://www.telegraph.co.uk/technology/internet/11980869/Fast-broadband-to-become-a-legal-right-for-everyone-in-Britain-says-David-Cameron.html.

[2] Broadband is defined as any type of internet connection (fixed or mobile) capable of providing a minimum of 256 kbps of data throughput. This is the official ITU definition.

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1.15%. Combining the effect of the adoption and speed changes contributed 5.49% to OECD GDP in total over the period or 0.38% annually on average. While speeds are important for the efficient use of broadband, there are limits – both practical and theoretical – to the actual use of higher speeds on the economy. To model these effects I try to identify the limits beyond which further increases have a zero or negative effect on the economy, due to the unutilized resources devoted to them. I find that these speed thresholds exist and they, in fact increase over time, from 3 Mbps in 2011 to 9.8 Mbps in 2016. These findings combined suggest that the trade-off between coverage and speed exists and aligns with economic intuition.

This paper is organized as follows: in Section 2 I present the relevant literature and in Section 3 the econometric model used to measure these findings. In Section 4 I briefly describe the data and in Section 5 I discuss the findings and conclude.

2. Literature

Today we can isolate several themes related to broadband networks that have emerged since the early days of non-dial-up access. First, scholars attempted to understand whether the deployment and use of networks had a measureable impact on the economy or perhaps the opposite effect was in place. The high correlation between broadband adoption and per capita income was indicative of a possible underlying link but the direction of causality was not guaranteed. Researchers were concerned about the residual effect from the use of these infrastructures on the economy that could be negligible or perhaps non-existent. Investments in new infrastructures have a direct effect on output and job creation, but the main interest was to measure the indirect effect of these networks to the broader economy. To address this issue various approaches were introduced with the main aim to disentangle the impact of broadband use from the level of economic development in each country.

In this context some influential papers found remarkably close estimates of this positive link showing that the addition of 10 broadband lines for every 100 people increased GDP by 0.7%–1.0% (Koutroumpis, 2009) and by 0.9%–1.5% (Czernich et al., 2011) respectively. Using a different methodological framework the World Bank reported estimates of 1.21% for developing countries and 1.38% for developed (Qiang and Rossotto, 2009). Expanding previous work the European Investment Bank (Gruber et al., 2014) found an annual impact of 1.36% from broadband adoption.

The effect of broadband networks on job creation has been central to the debate from the very early days of deployment. Researchers have often used availability rather than actual adoption information as a way to address data limitations (for example FCC Form 477 data only showed the number of operators that serve in each postcode). Using this information (Gillett et al. 2006) showed that communities with broadband availability experienced employment and business growth. This effect was more pronounced for businesses in IT-intensive sectors while the authors did not find any effect on wages. Crandall et al. (2007) reported a positive link between broadband adoption and employment showing that for every 1 percentage point increase in broadband penetration in a state, employment increases by 0.2%–0.3% per year.

Using a similar resource to (Gillett et al. 2006), Kolko (2012) reported supporting findings using a more robust econometric framework to infer a causal link between broadband availability and economic outcomes. He found that availability caused employment – but not wage – growth mainly in the ICT using industries in the US and also showed that these effects are higher in low-density areas. Using a firm level dataset Forman et al. (2012) contradict those findings. They show that advanced Internet is associated with significant wage and employment growth in locations with concentrated IT use, high income, high population and high skills but little evidence of a payoff from Internet investment outside of these locations.

Other researchers have looked into European samples shedding more light on to the original observations. Aligned with Kolko (2012) findings, Fabritz (2013) analyzed detailed municipal data in Germany and found a positive but rather small effect of ADSL enabled houses and employment growth that is mainly concentrated in regions further apart from large metropolises (further than 32 km). Looking into American neighborhoods Whitacre et al. (2014) support the view that broadband adoption instead of availability should be used as a predictor for economic outputs. They also found that income and employment growth are correlated with broadband adoption. Supporting Forman et al. (2012) results and using a firm level dataset as they also did, Canzian et al. (2015) use a detailed sample of ADSL2 + coverage and local firms in Italy. They showed that broadband availability was linked with high increases in annual sales and company value but very limited effects on employment growth (Canzian et al., 2015).

Another group of researchers looked into the value that consumers place on their connections as the main focus of study. In this context consumer welfare – the price consumers are willing to pay above the cost of the service provision – is assessed. Measuring this value is not always straightforward. By using the time spent on the Internet Goolsbee and Klenow (2006) traced an increase in consumer welfare ranging from 2% to 3% of full income or $2500 to $3800 in the linear case.

Using broadband penetration data Greenstein and McDevitt (2011) estimated a $4.8–$6.7 billion effect from consumer surplus in the US between 1999 and 2006. This estimate is remarkably close to Goolsbee and Klenow (2006) given that US population in 2006 was approximately 300 m and of these 60% were internet users. Other papers by Rosston et al. (2011) and Ahlfeldt et al. (2016) also find significant effects on consumer surplus from internet access that increase with service quality (speed and reliability).

More recently the quality components of broadband delivery have substituted the previous coverage and adoption focus. In response to the launch of national broadband plans with specific speed targets in the US, EU and other countries researchers tried to assess whether the increased investments in quality improvements would bring the foreseen benefits. Broadband speed[3] has been used as the primary variable of focus in most of these studies. Across these studies researchers seem to agree that basic connections are necessary for the majority of the population and find diminishing returns with speed. Gruber et al. (2014) report significant effects from basic speed adoption (higher than 1 Mbps) but only marginal effects from higher speeds. Rohman and Bohlin support this view showing that the necessary levels to realize these positive effects appear at 2–4 Mbps for OECD countries and 0.5 Mbps for Brazil, India and China (BIC) countries. They also indicate that the highest effects appear at the speed range of 4–8 Mbps and that doubling broadband speed contributes 0.3% to GDP growth.[4,5]

Looking into broadband speeds in the US Rosston et al. (2011) found that the average household is willing to pay about $20 per month for more reliable service and $45–48 for an increase in speed. Departing from survey data, Ahlfeldt et al. (2016) used a rich UK micro-dataset to link broadband speeds as a capitalization effect on property prices. They indicate that a basic connection (8 Mbps) is worth 2.8% of the property price and 3.8% for a fast connection (24 Mbps) supporting the diminishing returns to speed findings. These last two studies find

[3] Gruber et al. (2013), Ahlfeldt et al. (2016), Rohman and Bohlin (2013), and Rohman and Bohlin (2012).

[4] The authors here also suggest that diminishing returns exist.

[5] A report by the Department of Culture, Media and Sport showed that faster broadband speeds are expected to add £17 billion to the UK annual GVA by 2024 (average of 0.07 percentage points to real annual gross or net? GVA growth).

remarkably close estimates for consumer willingness to pay using very different empirical strategies.[6]

3. The model

This research replicates the model set out in Koutroumpis (2009). The model is composed of an aggregate production function which links national aggregate economic output GDP_{it} to a set of production factors in each country i at time t. In particular the stock of capital (K), labour (L) and the stock of broadband and fixed telecommunications infrastructure. The stock of broadband infrastructure is used rather than the broadband investment because consumers demand infrastructure and not investment per se. Since the expected growth effects deriving from broadband accrue from the use of the infrastructure I approximate these effects through the level of broadband adoption (BB_Pen).[7]

Aggregate production function

$$GDP_{it} = f(K_{it}, L_{it}, BB\_Pen_{it}) \quad (1)$$

Real GDP thus is a function of labour force, capital stock and broadband infrastructure. While the coefficients for labour (L) and capital (K) should be typical for production functions, the coefficient of broadband penetration in Eq. (1) estimates the one-way causal relationship flowing from the stock of broadband telecommunications infrastructure to aggregate GDP. In order to disentangle the possible effects of broadband telecommunications infrastructure on GDP from the effects of GDP on broadband telecommunications infrastructure, I specify a micro-model for the telecommunications sector in each country consisting of three equations for demand and supply of broadband infrastructure, as well as an infrastructure output function.

Demand for broadband infrastructure

$$BB\_Pen_{it} = g(GDPC_{it}, BBPr_{it}, EDU_{it}, RD_{it}, Urb_{it}) \quad (2)$$

The demand Eq. (2) links broadband penetration as a function of GDP per capita (GDPC), the price of the broadband service[9] (BBPr) and other parameters that affect the propensity to adopt broadband technologies, namely the education level in country i, the percent of GDP invested in research and development (R&D) and the level of urbanization (Urb).

Supply of broadband infrastructure

$$BB\_Inv_{it} = h(BBPr_{it}, HHI_{it}) \quad (3)$$

Modeling the supply of fixed telecommunications infrastructure is not always straightforward. Coverage of high-speed networks depends on operators' strategic decisions as well as the socio-economic and geographic parameters. Eq. (3) can thus be seen as a stylized representation of the supply side. Broadband investment per capita (BB_Inv_{it}) in a country is linked to broadband prices for that period and to competition across technologies. To measure competition across different technologies I estimate the Hirschman Herfindahl Index (HHI) for the relative shares of copper, cable, fibre and other networks in each country. The index ranges from zero to one: in a fully concentrated market where all subscribers use a single platform the index equals 1. As more platforms are used and subscribers are more evenly distributed across networks the HHI approaches zero.

Broadband infrastructure production function

$$\Delta BB\_Pen_{it} = k(BB\_Inv_{it}) \quad (4)$$

The infrastructure Eq. (4) links the annual change in broadband penetration with the broadband investment per capita, taken as a proxy of the capital invested in a country during one year. The infrastructure increase is modeled as a function of investment, as this should be the main source of funding of infrastructure growth by broadband firms. Eqs. (2), (3) and (4) endogenize broadband telecommunications infrastructure because they involve the supply and demand of broadband telecommunications services. The econometric specification of the model is as follows:

Aggregate production equation

$$\log(GDP_{it}) = a_1 \log(K_{it}) + a_2 \log(L_{it}) + a_3 \log(BB\_Pen_{it}) + \varepsilon_1$$

Demand equation

$$\log(BB\_Pen_{it}) = \beta_1 \log(GDPC_{it}) + \beta_2 \log(BBPr_{it}) + \beta_3 \log(EDU_{it}) + \beta_4 \log(RD_{it}) + \beta_5 \log(Urb_{it}) + \varepsilon_2$$

Supply equation

$$\log(BB\_Inv_{it}) = \gamma_1 \log(BBPr_{it}) + \gamma_2 HHI_{it} + \varepsilon_3$$

Broadband infrastructure production equation

$$\log(\Delta BB_{Penit}) = \delta_1 \log(BB_{Invit}) + \varepsilon_4$$

The countries in the sample do not necessarily share the same characteristics with one another in terms of local economic conditions, culture and other location-specific preferences. To account for this variation and to refrain from treating observations from different origins as otherwise identical, I add a full range of country fixed effects in the regressions (Table 2) that help capture these effects. Similarly, there may be temporal variations due to political, social or economic changes within countries that capture seasonal or cyclical trends and business cycles that are reflected in the panel data and would falsely be attributed to the measured phenomenon. I use year fixed effects in all specifications to capture these annual effects.

4. Data

Building on the work of the previous studies, the dataset used in this study consists of annual observations from 35 countries for the fifteen-year period between 2002 and 2016. The countries included in the analysis used are listed in Appendix A (Table A1). The data used have been collected by the ITU and the OECD depending on their nature and availability (see Table 1). The Hirschman-Herfindahl (HHI_{it}) market and technology concentration index for each country i is calculated[10] as the sum of the squares of market shares of all technologies in the market at time t.

5. Results

The baseline specification Eqs. (1)(4), confirms previous findings and reinforces our understanding of the impact of broadband on the economy (Table 2, column 1).[11] Labour and capital have the expected signs, significance and ratios for the set of observations used as they are

[6] Turning the monthly effect into a perpetuity with a 5% interest rate yields $11,520 for the change from basic to fast connection in Rosston et al. (2011) and $12,540 in Ahlfeldt et al. (2016).

[7] References are given in Table 1.

[9] This variable is collected from ITU (WTID) and is defined as the monthly connection charge for fixed (wired) broadband internet service. Fixed broadband service is considered to be any dedicated connection to the internet with downstream speeds equal to or greater than 256 kbps. If several offers are available preference will be given to the 256 kbps (or other minimum connection speed).

[10] Author's calculations from annual data.

[11] Column 2 of Table 2 presents results which distinguish between different line speeds. The results for this specification of the model are discussed on.

Table 1
Data used in the analysis and sources.

Variable	Source	Obs
GDP (constant 2010 US$)	OECD	525
GDP per capita (constant 2010 US$)	OECD	510
Gross fixed capital formation (% of GDP)	OECD	506
Fixed broadband subscriptions (per 100 people)	OECD	474
Fixed broadband Internet monthly subscription (US$)	ITU	523
Urban population (% of total)	OECD	510
Government expenditure on education, total (% of GDP)	OECD	387
Research and development expenditure (% of GDP)	OECD	386
Fixed (wired)-broadband speed; in Mbit/s	ITU	305
Annual investment in telecommunication services (US$)	ITU	418
Labour force participation rate, total (% of total population ages 15+) (modeled ILO estimate)	OECD	510
DSL Internet subscriptions	ITU	525
Fixed-broadband subscriptions	ITU	525
Cable modem Internet subscriptions	ITU	525
Fibre-to-the-home/building Internet subscriptions	ITU	525

Table 2
Econometric results broadband impact, by quality of connections and penetration rate.

Variables	3SLS estimates	3SLS estimates
	(1)	(2)
Production (GDP_{it})		
Fixed stock of capital (K_{it})	0.152*** (0.0272)	0.153*** (0.0269)
Labour (L_{it})	0.848*** (0.162)	0.823*** (0.160)
Broadband Lines (BB_Pen_{it})	0.0464** (0.0201)	0.0482** (0.0198)
Broadband Speed (BB_Speed_{it})	–	0.0147** (0.00613)
Demand (PEN_{it})		
GDPC ($GDPC_{it}$)	0.286*** (0.0953)	0.287*** (0.0953)
BB. Price (BB_Pr_{it})	−0.501*** (0.113)	−0.502*** (0.113)
Urbanization	−0.062*** (0.0233)	−0.0606*** (0.0233)
R&D	0.521*** (0.0874)	0.520*** (0.0874)
Education level	0.507*** (0.196)	0.508*** (0.196)
Supply (BB_Inv_{it})		
BB Price (BB_Pr_{it})	0.367*** (0.117)	0.368*** (0.117)
HHI (HHI_{it})	0.583*** (0.188)	0.583*** (0.188)
Output (ΔPen_{it})		
BB Investment (BB_Inv_{it})	0.150*** (0.00160)	0.153*** (0.0579)
Controls		
Country FE	Yes	Yes
Year FE	Yes	Yes
Observations	241	241

***,**,* denote statistical significance at the 1%, 5% and 10% respectively.

both positive and highly significant for economic output. Broadband adoption enters the regression with a positive and highly significant coefficient too. On average the OECD sample grew from 3.8 connections per 100 people in 2002 to 31.3 connections per 100 people. The implied GDP impact from this change can be measured using Eq. (5), which links adoption levels and the coefficient for broadband α_3. Using this formula we can translate broadband adoption changes to increased economic output as it has been used in previous studies (see Röller and Waverman (2001), Koutroumpis (2009) and (Gruber and Koutroumpis 2011)):

$$GDP_{BBPen} = 1 - e^{(\log BBPen_{2016} - \log BBPen_{2002}) * a_3} \quad (5)$$

I find that – during this period – the increase in broadband connections per 100 people contributed to a cumulative GDP increase of 4.34% for the countries in the sample. A ten-line increase from 20 to 30 lines per 100 people leads to a 0.82% GDP impact but the effect diminishes with higher adoption rates. An identical ten line increase from 10 to 20 lines yields 1.40%. This estimate is in line with previous findings by Koutroumpis (2009), Qiang and Rossotto (2009) and Czernich et al. (2011).

Before moving further in the analysis it is important to explain how broadband affects GDP over time. Imagine two identical economies that only differ in broadband adoption. Apart from the levels, the rate of broadband adoption matters for GDP too. An identical 10-line increase in adoption per 100 people, yields the same GDP effect (level) irrespective of the period over which this is achieved; however a higher rate of increase in broadband leads to a higher annual impact on GDP over a shorter period. This growth rate is sustained until no more subscribers are interested in connecting to the network leading to a saturation point in adoption with no further increases in GDP, other things (especially speeds) being equal. The annual rate of GDP growth is given by Eq. (6) that helps annualize the level effects from increased adoption:

$$GDP_{BBPen\_annual} = \{e^{(\log BBPen_{2016} - \log BBPen_{2002}) * a_3}\}^{\frac{1}{\Delta t - 1}} \quad (6)$$

From this formula it is easy to estimate that a 10 line increase (from 20 to 30 lines) over 5 years yields a 0.2% GDP impact whereas the same change over 10 years yields only 0.09%. The overall effect remains the same but the rate is affected. For the entire period (2002–2016) in the OECD sample the implied GDP effect from broadband is 0.30% per annum on average. For the UK the effect was 0.37% per annum on average, with a total impact of 5.28% (moving from 3 lines per 100 people in 2002 to 38.6 in 2016).

To maintain this momentum once broadband adoption reaches a saturation point, the intensive margin of the infrastructure has to be exploited through improvements in quality that enable the use of a wider range of services.[12] Since this first estimate (Table 2, column 1) isolates the effect of increased adoption from any other quality improvements that may have taken place during this period I further introduce the speed variable in the regression. For this I add a broadband speed variable in the production function (see Table 2, column 2) to assess the variations in quality of broadband access on GDP. The broadband capital investment in each economy is proxied by adoption in Eq. (1):

$$BB_{it} = BB_{adoption_{it}} \quad (7)$$

As speed is a key predictor of the network quality I rewrite Eq. (7) as:

$$BB_{it} = BB_{adoption_{it}} \times BB_{speed_{it}} \quad (8)$$

Speed is not strictly exogenous as wealthier countries may indeed have higher quality of connections. To proceed with this analysis, I assume that any reverse effect from GDP on speed is largely absorbed by the adoption variable. The production function now becomes:

$$\log(GDP_{it}) = a_1 \log(K_{it}) + a_2 \log(L_{it}) + a_3 \log(BB_{Penit}) + a_4 \log(BB\_Speed_{it}) + \varepsilon_1 \quad (9)$$

The speed coefficient (measured in Mbps) enters the regression with a positive and significant coefficient as expected. This estimate implies that, possibly, part of the quality improvements at the country level had been captured by country and year controls in the adoption-only results. Substituting adoption with speed in a modified version of Eq. (5) I estimate that increasing speeds from 2 Mbps to 8 Mbps adds 0.9% on GDP. If this change happens over a period of 10 years it leads to an annual GDP increase of 0.10% on top of any changes in adoption. A country that achieves this transition in 5 years will increase its annual

[12] The extensive margin refers to the increase in adoption and the intensive margin to increases in quality (including speed) increases.

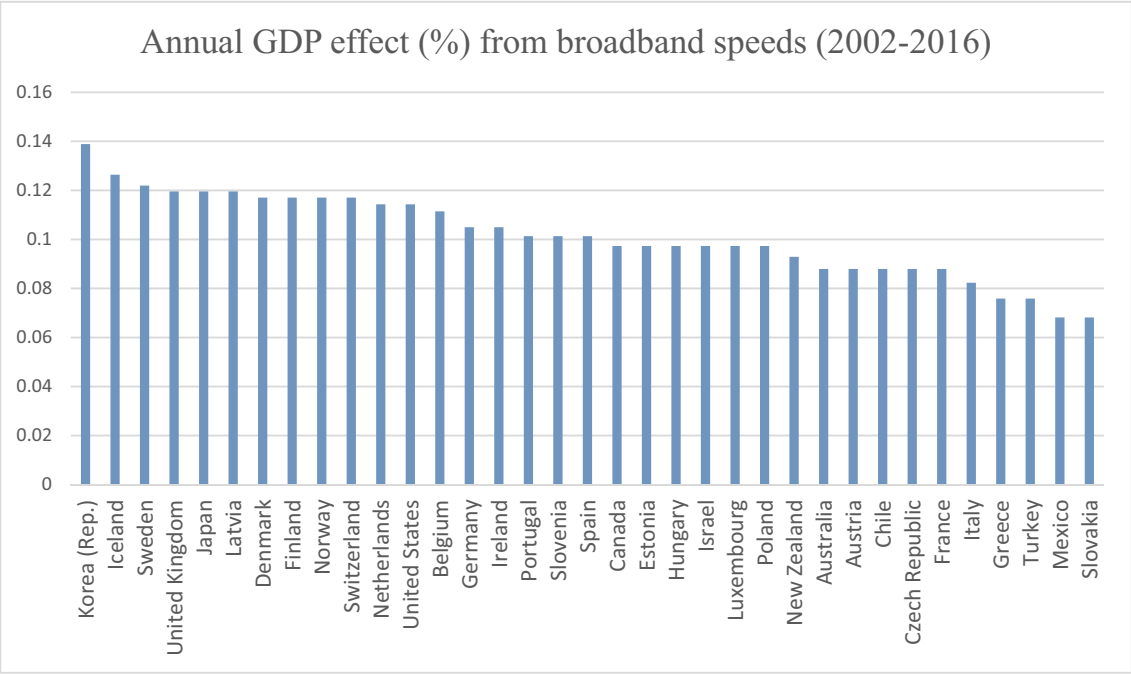

Fig. 1. The annual GDP impact of broadband by country. (These speed effects are not constrained by second order effects. If they were then the theoretical upper bound of speed impacts on GDP would reach a maximum of 0.11% per annum (if a country started with no broadband in 2002), or an actual upper bound of around 0.1% per annum. However that would assume that the 9.8 Mbps upper threshold is the same across all OECD countries.)

GDP by 0.22% leading to a higher annual GDP increase for a shorter period of time. Like adoption, the rate of speed increases matter for GDP as illustrated in this example. Overall the OECD region grew from a 0.75 Mbps speed in 2002 into 12.85 Mbps in 2016. The GDP change from this increase is 1.32% and the annualized effect 0.09% (the country level results are shown in Fig. 1). Combining the effect of the adoption and speed changes contributed 5.66% to OECD GDP in total over the period or 0.39% annually on average. For the UK, the speed increase contributed 1.71% to GDP in total and 0.12% annually. Combining the effect of the adoption and speed changes increased UK GDP by 6.99% cumulatively and 0.49% annually on average.

In contrast to the adoption variable that is normalized (minimum of 0 maximum of 1) the speed variable does not have similar restrictions. However, the implied linear link between speed and economic growth should not be taken for granted. To test the behavior of this link I modify Eq. (8) replacing the interaction between adoption and speed with a second order polynomial expression for speed. In this setting the predictor of quality is used to describe the level of readiness across economies rather than the level of adoption. The results of this model are found in AppendixA (Table A2). The negative and significant coefficient in the quadratic term suggests that speed has diminishing returns on GDP. In fact I find that – for the average country in the sample – the highest effects from speed are realized up to a certain speed level. For the time period under consideration, this level is at the maximum of the inverted u-shaped curve with a peak of 9.8 Mbps.[13] The implied effect suggests that there was little – if any – effect for further investments beyond this point at the mean of the distribution of broadband users. This speed threshold varies across countries and over time though. For example, some economies may be able to utilize higher levels of speed during this period and others may be unable to make productive use of even lower levels. This heterogeneity is explained through the "readiness" of the economy to transform the quality of infrastructure into economic outcomes. Taking this observation into consideration reduces the overall GDP effect for the OECD sample to 0.38% annually or 5.49% in total. The adoption effect remains at 4.34% in total while the speed effect drops from 1.32% to 1.15%, and from 0.09% to 0.08% annually on average. For the UK, the overall GDP effect reduces to 0.47% annually and 6.67% in total. The adoption effect remains the same but the speed effect reduces from 1.71% to 1.38% in total and from 0.12% to 0.10% annually on average. The upper speed threshold may be increasing over time as new services appear that help firms and individuals productively use the improved infrastructures.

It is important to note here that broadband speeds can also reach a saturation point. This may happen due to physical limitations of data transfer or because any further increase would make no economic sense (i.e. the data transfer protocols have improved so much that no further investments are necessary in fixed broadband infrastructure). In this case the GDP effects from broadband use cannot be explained any further from this model. A country that has reached the saturation point in adoption and speed may experience additional GDP effects but these would not be attributed to the networks anymore. The model used in this analysis and Eq. (6) indicates that any residual GDP returns beyond this point would be attributed to new products and services and not the underlying network that enabled them to appear. This is in line with the impact of other essential but often saturated infrastructures like the transport network, the electricity grid or the water distribution system.

For example, countries with lower average speeds over the period 2002–2016 had a smaller GDP impact from the use of the networks (other things being equal). In Mexico with an average speed of 1.16 Mbps and Turkey with 1.84 Mbps the annual GDP impact from

[13] The cap is an average across OECD countries, it may differ by country though I am unable to estimate this at country level. This cap is estimated at 3 Mbps in 2011 and 6.7 Mbps in 2014, i.e. it has been increasing over time.

broadband speeds ranged from around 0.06% to around 0.07%. At the other extreme Korea and Japan, closely followed by Sweden and the UK, have been leading in terms of network quality and speeds (11.58 Mbps and 7.88 Mbps respectively for the period). This has helped them increase their relative gains between 0.12% and 0.14% on an annual basis.

Looking into the rest of the results from Table 2 (column 1 and 2), the demand and supply functions also have the expected results with income as a major contributor to adoption and supply of broadband services. I find that the overall broadband demand proxied by the country level adoption per year is positively linked to income per capita. Broadband prices enter the demand equation with a negative and significant sign confirming the relatively inelastic relationship with broadband adoption.

Urbanization has a negative effect on adoption, which seems counter-intuitive. Investment in broadband networks in urban areas is often more cost-effective and the services offered over the Internet cover urban areas more quickly. Hence it would have been expected that higher urbanization leads to increased broadband adoption. Looking at the variable itself, it is defined as the share of inhabitants in – nationally defined – urban and suburban regions. This lack of a common standard on the definition of regions limits the predictive power of this metric especially in cross-country comparisons.[14]

The other variables in this regression including the average education level in a country and the expenditures in R&D seem to be positively linked to higher levels of broadband adoption in line with expectations.

The supply equation links the normalized (per capita) annual investment in broadband networks with prices and infrastructure competition. Prices are positively linked to adoption suggesting that, perhaps unsurprisingly, network operators prefer to invest in places where higher revenues are expected. Similarly the more concentrated a market is the higher the propensity to invest, i.e. operators prefer markets with one rather than more competing broadband networks. This link is not linear though; the relationship between market concentration and investment is an inverted U-shaped curve (indicated by a negative quadratic HHI coefficient) with lower investment per capita in a very fragmented or highly monopolized market and higher investments per capita in competitive oligopolies (see Table A2 in AppendixA).

The output equation links broadband investment with the difference in adoption per year. As expected the increase in investment (e.g. in coverage or quality) has a positive and significant footprint on overall adoption.

6. Discussion

The findings of this study confirm that broadband adoption affects the economy and that the quality of networks plays a significant role in this process. It is further shown that, for the time period under consideration, the returns from increasing speeds on GDP are positive but diminishing (Table 2 and Table A2). The upper threshold of speed related gains is moving higher as a result of the "readiness" of the economy (individuals or firms) to make productive use of improved infrastructures through the availability of services that demand more bandwidth. This is an important policy implication when future broadband strategies are considered. The rationale of this finding rests with standard economic intuition. Every economy consists of a set of resources and skills that determine its economic capacity: on the extensive margin production can only increase if more labour (of identical skills) or capital is put in place. Still, there are various technologies that help the economy produce more by coordinating its activities, reducing communication costs and improving market conditions by increasing its capital and labour intensive margins (producing more from a more efficient use of the *same* resources). Through this analysis the maximum GDP effects are found in countries that moved from the lowest to the highest speeds over the period 2002–2016.[15]

As well as the potential for diminishing returns to speed, it is shown that broadband as a network technology has a measurable effect on economic output. Through information exchange, new services and telework it has helped increase GDP by an average of 0.38% each year for the OECD countries. I show that this effect is related to the quality of infrastructure. On average a country at the highest speeds (capped by the 9.8 Mbps threshold) would gain 0.08% more on its annual GDP compared to an identical country at the lowest speeds (the lowest quartile in the sample, which is 0-1 Mbps). This corresponds approximately to a speed increase from 1 Mbps to 10 Mbps. Taking into account the diminishing returns to speed a similar change for a country starting from a higher speed in 2002 would have a smaller marginal effect.

Using this information, policy makers can adapt their strategies on two fronts, namely the effects of wider adoption until saturation and the relative merits of higher quality at various levels of adoption. Moreover, these findings provide the ground for comparison across countries and help plan future investments – with variations in public funding – as the costs and benefits accrue from a measurable impact on GDP.

Having analyzed the implications of the findings I discuss the data limitations and caveats related to the methodological design. In this analysis I used national level data – in the absence of more granular information – with the implicit assumption that these can adequately represent the country level conditions. As it has often been observed,[16] there is higher heterogeneity within countries than across them making these observations sensitive to outliers or other types of heavily skewed distributions. Along the same rationale, the use of one observation per year could be improved by more granular observations that help account for seasonal (pricing/advertising campaigns) or cyclical (exchange rates) events commonly found in the evolution of broadband adoption. A number of assumptions need to be made to carry out this analysis. For example, building a year by country panel assumes that there is one type of consumer that matches (or averages) the preferences of all types observed in this country and year. This is a strong assumption and the results should be interpreted with these shortcomings in mind.

Besides the limitations in data granularity there are other parameters that may affect the results. For example, it is not clear if all

[14] There are various limitations in measuring urbanization according to the World Bank (2017): "Aggregation of urban and rural population may not add up to total population because of different country coverage. There is no consistent and universally accepted standard for distinguishing urban from rural areas, in part because of the wide variety of situations across countries. Most countries use an urban classification related to the size or characteristics of settlements. Some define urban areas based on the presence of certain infrastructure and services. And other countries designate urban areas based on administrative arrangements. Because of national differences in the characteristics that distinguish urban from rural areas, the distinction between urban and rural population is not amenable to a single definition that would be applicable to all countries. Estimates of the world's urban population would change significantly if China, India, and a few other populous nations were to change their definition of urban centers. Because the estimates of city and metropolitan area are based on national definitions of what constitutes a city or metropolitan area, cross-country comparisons should be made with caution". World Bank Data Portal (data.worldbank.org, accessed November 2017).

[15] To compute this level for the highest cluster (the top quartile which had speeds > 8 Mbps) I modified Eq. (1) by adding a variable for speed and speed^2. The results are show in Table A2, column 2. The maximum speed is calculated by the maximum of the speed curve. Country fixed effects can affect this OECD-level interpretation; also the implied negative impacts of speed on GDP beyond the 9.8 Mbps should be handled as a plateau (see Ahlfeldt, et al. 2017).

[16] See Acemoglu and Dell (2010) on productivity between and within countries; also Atkinson et al. (2011) on inequality; Lakner and Milanovic (2016) on income distributions.

broadband plans are available to every user due to the presence – or lack thereof – of various operators across each country. Similarly, there is no information with regards to coverage suggesting that the option to adopt may not be offered to everyone in equal terms with regards to the technologies and networks available. Other national level observations presume a uniform distribution for investments in education or research. These effects may be driven by various factors like the presence of technological hubs or research centers often concentrated around to metropolitan areas or universities.

Beyond the information availability this research incorporates some methods that help measure the impact of broadband on the economy. Evaluation of specific interventions is best measured through quasi-experimental designs where the population is split in a randomly selected treatment and control group. Ideally we would prefer a setting with two identical areas – one with and one without broadband – to test the impact we are after. Since this is not possible I used a closed form framework that tries to mimic broadband market dynamics within an economy. This does not necessarily produce biased results but it is possible to suffer from omitted variables or are other confounding effects (apart from broadband) driving or diminishing the impact of connectivity (i.e. sub-national, cultural, technical, etc.).

In terms of the gaps in the literature there are still several aspects that need to be covered. For instance, there is still a scarcity of studies that tie broadband speeds and firm productivity over a long period of time. Related to this there are no clear links between job creation and redistribution (see Forman et al., 2012) with broadband infrastructure. Apart from the utilization of broadband connections for services hosted within firms there is a substantial part of outsourced storage and computing capacities (IaaS, SaaS, etc.) of ICT firms on the cloud. This change may have an impact on the productivity estimates for ICT firms as equipment is not purchased and used as before and increases the dependency towards a faster and more reliable network. This may link other service delivery parameters (like latency) to be factored in future studies.

Last it is important to state that in this modeling framework I have looked into the economic effects of broadband across countries. Other significant effects including life satisfaction and welfare have not been measured although we have evidence that access and use of the networks affects them.[17]

Appendix A

Table A1 lists the countries that have been used in the analysis.

Table A1
Countries included in the dataset.

Australia	Hungary	Norway
Austria	Iceland	Poland
Belgium	Ireland	Portugal
Canada	Israel	Slovakia
Chile	Italy	Slovenia
Czech Republic	Japan	Spain
Denmark	Korea (Rep.)	Sweden
Estonia	Latvia	Switzerland
Finland	Luxembourg	Turkey
France	Mexico	United Kingdom
Germany	Netherlands	United States
Greece	New Zealand	

Table A2 provides some additional findings. In Column 1 a quadratic term for HHI is added to show the inverted U-shape curve that links competition and investments. In Column 2 a quadratic speed term is added to indicate the diminishing returns to speed (and the computation of the maximum level of impact at 9.8 Mbps).

Table A2
Quadratic speed findings.

Variables	3SLS estimates
	(3)
Production (GDP_{it})	
Fixed stock of capital (K_{it})	0.151*** (0.0252)
Labour (L_{it})	0.702*** (0.160)
Broadband Lines (BB_Pen_{it})	
Broadband Speed (BB_Speed)	0.0339*** (0.00671)
Broadband Speed squared (BB_Speed)	−0.0172*** (0.00251)
Demand (PEN_{it})	
GDPC (GDPCit)	0.300*** (0.0953)
BB. Price (BB_Prit)	−0.500*** (0.113)
Urbanization	−0.0610*** (0.0233)
R&D	0.509*** (0.0875)
Education level	0.499** (0.196)
Supply (BB_Inv_{it})	
BB Price (BB_Pr_{it})	0.366*** (0.117)

[17] Kavetsos and Koutroumpis (2011); Graham and Nikolova (2013); Pénard et al. (2013)

Table A2 (*continued*)

Variables	3SLS estimates
	(3)
HHI (HHI_{it})	0.582*** (0.188)
HHI^2 (HHI_{it})	
Output (ΔPen_{it})	
BB Investment (BB_Inv_{it})	0.154*** (0.0579)
Controls	
Country FE	Yes
Year FE	Yes
Observations	241

***,**,* denote statistical significance at the 1%, 5% and 10% respectively.

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r/Comcast • 3 yr. ago
TimeRocker

Update: Upload issues caused node overload

Discussion

If anyone has seen any of my posts the last 2-3 months, you'd see I've been having constant on and off issues with my upload speed. I stream regularly on Twitch so anytime there's an issue with the upload, I see it live. I've had multiple techs out, run all kinds of tests and replaced modems, cables, you name it. I've been in direct contact with the local supervisor working on trying to discern what the cause is for a few months.

Well today, he calls me with an update that he was able to get a field tech to look into it. As it turns out, the node for our area is at around 95% upstream capacity nearly 24/7. We don't know the exact reason, but someone in the area is likely running a server or something and constantly uploading a LOT data. It makes sense now why I tend to have more issues during peak hours than at other times because it's pushing the node to 100% capacity, which then leads to me dropping frames but then my download isnt affected hardly at all.

He informed me there had already been plans down the line to upgrade and add a second node for the area to cover higher speeds and a higher capacity, but it was months away. He's gonna try and use this new

[deleted] • 3y ago

You would see a speed issue way before 95%. At 95% you have people being unable to connect at all which is why it is rare for that to ever happen. US and DS capacity is monitored and at around 65% engineering is already looking at node segmentation, splitting the node or new node, how many spare fiber there is, is the node combined with another node so it can get its own US card- there's lots of options that could be done in one night. Capacity is also something that they would have looked at way before 2-3 months, it's a button they can click on right beside USSNR/USCER which is the problem you probably really do have. There's also no way this is effecting 5k subscribers- you hit capacity way way before that and one person running a server isn't going to be able to have that big of an effect.

7

[deleted] • 3y ago

9

5 more replies

spinne1 • 3y ago

Unlimited isn't really unlimited. If someone really is burning the node down trying to run a commercial-type operation, Comcast can and should shut it down. It is not right to hurt everyone else in the node. I have to wonder whether the supervisor is being fully honest. By that, I mean that if what he is saying is true then they were fully aware of that long ago and should have split the node long ago. Node congestion is monitored at all times by various processes and I can't imagine them allowing capacity uploads to get unfettered for months without plans to fix it. It is surprising to me in any case even if fully true.

5

3 more replies

joey0live • 3y ago

Uhhh, I can’t see one server doing this… I can see many…. But that’s a lot of bandwidth. I WFH, and during my 9-5 shift, I’m usually uploading and downloading at least 200-300GB a day. Yes… I’m serious.

2

TimeRocker OP • 3y ago

I work from home and yes, you can upload and download a bunch of data, but its not the total data amount that matters, its the amount of data constantly being uploaded that is causing a congestion at the node.

1

1 more reply

1 more reply

[deleted] • 3y ago • Edited 3mo ago

KarmicEQ • 3y ago • Edited 3y ago

The bigger problem is false advertising. Comcast advertises that you will have a reliable, high-speed internet connection. You are paying for a service with a stated level of service that you are not receiving. I know that Comcast is the disclaimer King but, it is a pattern and practice that they sell tiered service packages that fail to perform a majority of the time.

If the effect is you are only getting lower tier numbers, you should only be paying lower tier prices. This is the biggest scam of cable internet. They let their equipment degrade, blame high usage and then place a

None of this is said without the understanding of load issues, bandwidth restrictions and other physical realities - it's just that Comcast is notorious for poor maintenance.

This is the same script they used on me. First it was a "my equipment"; then a bad drop; then my equipment; then a bad amp; then a bad node; then a problem in the server office. It wasn't until the threat of the FCC and an email to the CEO did they finally send a maintenance crew.

I had upload speeds of 0-1 mbs over a year long period. It made gaming impossible and file sharing for work painful. They eventually sent 3 maintenance crews that worked 7 days a week for 3 months to repair all of the issues in our neighborhood.

They won't do anything unless under threat of massive fines. Don't accept the "one day we'll get to it" line. The CS folks have no power to force change. They can send requests, but they don't have any power to force change. Escalate to supervisor, report to FCC. The only way to get them to act.

Addendum: This was pre-COVID, so the excuse of oversold subs not an issue. There was a span downstream from me that had been in a fire, and one of their techs lived on the affected side - they wouldn't even address it for them. It's one thing to say there are short periods where the system is stressed, it is another to have consistent failures to perform. I had 7 techs at my home, each time they started with it must be your equipment. There were multiple spans and other equipment that were bad or in significant disrepair.

This is a pattern of deception that seeks to deny proper service and promote a sense of frustration such that the customer gives up and accepts the sub-standard service as normal.

AT&T brought fiber into our neighborhood within 6 months of this incident finally being resolved and I switched. I have never experienced the level of failure that occurred with Comcast. In the 4 years since this happened, I have only had 2 periods where service was degraded, and each time it was only for a couple of hours.

"Lack of bandwidth" falls into the category of fraud. They know exactly how many people are in each area, how much capacity they have(they are federally regulated and must report this), and how many complaints they have(again, reportable).

Continuing selling a service that will never meet the advertised expectation is fraud, regardless of the fine print starting otherwise. CC is still charging a premium fee for a level of service that, while it may not reach peak performance, should still function above the other promised levels of performance in lower tiers. They have no obligation to tell you the truth about what the problem is but, lying to regulators is a felony. Deceptive business practices is a felony. The biggest problem is that no one really wants to take the time to hire an attorney and spend the years it would take to fight this behemoth.

1

TimeRocker OP • 3y ago

The speed you pay for is what the goal is, but not guaranteed. When things are working as expected, I get 1Gbps Down and 22Mbps up. Im paying for 900/20. When things are absolute shit and I cannot even stream, I contact Comcast and they give me a credit for the day which is $10. If they do that

tech that comes to my house or anything.

1

r/TVTime • 1 mo. ago

Server issues?

42 upvotes · 11 comments

r/Twitch • 3 yr. ago

OBS Streams keep crashing randomly - HELP

5 upvotes · 3 comments

r/GraalOnline • 3 mo. ago

Server Outages

8 upvotes · 12 comments

r/FidiumFiber • 2 mo. ago

Network outage

12 upvotes · 6 comments

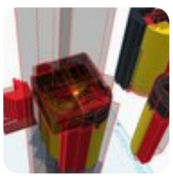
r/joinsquad44 • 5 days ago

Please fix the reload system, it's really bad.

27 upvotes · 22 comments

r/tinkercad • 2 mo. ago

I might need to switch to a more powerful software at this point...



32 upvotes · 32 comments

r/unRAID • 3 yr. ago

UPS installed, detected and enabled: power outages consistently shutdown uncleanly

9 upvotes · 15 comments

3 upvotes · 23 comments

r/XC40 • 4 mo. ago

Fed up with constant software issues

17 upvotes · 29 comments

r/AirTags • 4 mo. ago

I was in the middle of setting up, things happened, now can't

4 upvotes · 9 comments

r/mk11 • 3 days ago

Unable to connect to the servers

8 upvotes · 26 comments

r/CableTechs • 8 mo. ago

Guys is my Node Self Terminating? /S

27 upvotes · 17 comments

r/anarchyonline • 2 mo. ago

Server Crashing!

33 upvotes · 49 comments

r/Onmyoji • 6 mo. ago

Server issue

29 upvotes · 13 comments

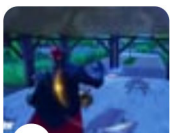
r/SecretWorldLegends • 2 mo. ago

Server crashing exploit

29 upvotes · 14 comments

r/FortniteSwitch • 12 days ago

Blitz loading issue?



r/CrueltySquad • 4 mo. ago

At least, I assume that's causing the issue anyway. Seems like a lot of code to process at any given moment.

953 upvotes · 59 comments

r/statusAI • 5 mo. ago

server problems

5 upvotes · 7 comments

r/outside • 5 mo. ago

I've discovered an adjacent server, but it crashes every time I join.

164 upvotes · 23 comments

r/doordash_drivers • 3 yr. ago

No one is stealing your data. This is probably why the data spikes are happening:

30 upvotes · 40 comments

r/NobaraProject • 20 days ago

Update System Problem

7 upvotes · 29 comments

r/FidiumFiber • 3 yr. ago

Using own router and constantly changing addresses - hopefully a conclusion (NH)

6 upvotes · 9 comments

r/MSILaptops • 3 yr. ago

My MSI GF65 shuts down randomly(completely goes black screen like someone unplugged the battery) when on battery. Sometimes gets shut down even when CPU temperature is just under 60C. All this whe...

5 upvotes · 3 comments

r/CableTechs • 3 mo. ago

Had an outage today

25 upvotes · 14 comments

r/cataclysmbn • 4 mo. ago

73 upvotes · 8 comments

LANGUAGES

Français

TOP POSTS

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reReddit: Top posts of October 23, 2022

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reReddit: Top posts of October 2022

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Brattle

ANNOUNCEMENT

March 26, 2025

Brattle Experts Affirm Findings on Fiber Deployment Benefits Following Recent Study Review

Brattle Principals Coleman Bazelon and Paroma Sanyal have reviewed a March 2025 study from the Phoenix Center titled "Economic Benefits of Fiber Deployment: A Review of The Brattle Group Study." The Phoenix Center study was conducted in response to Brattle's November 2024 report, *Economic Benefits of Fiber Deployment*. Below are four key points addressing the Phoenix Center's review:

Alignment on Positive Impacts

The Phoenix Center's reanalysis confirms the Brattle team's original finding that fiber infrastructure contributes positively to property valuations, identifying a positive impact from fiber broadband on home values and rental rates. The Phoenix study finds a 5.6% increase in housing values for suburban areas. To put this in context, the Phoenix Center's reanalysis finds the positive economic benefit generated by deploying fiber is likely much greater than the BEAD funds which were targeted for preferred fiber deployment.

Employment Impact Assessment

this may be the case, calling into question the reliability of the study's conclusions.

Technical Considerations

The Phoenix Center study raises superficial technical concerns regarding the Brattle report's methodology – none of which undermines the results of the Brattle report – that fiber deployment had a significant positive impact on certain economic indicators. The Phoenix Center study focuses on the definition of urban, conflating all non-rural areas as urban, when much of the country is actually suburban. Further, criticisms of technical issues – such as multiplicative versus additive impacts, and parallel trends – are underdeveloped, with insufficient support for the analysis to be able to evaluate the criticisms.

Regardless, the criticisms do not undermine the Brattle report's results. In fact, as mentioned above, even the Phoenix Center's own analysis is consistent with Brattle's findings on housing values, but the contradictory results are dismissed, arguing that improved home prices are not a benefit.

Transparency & Communication

Although the Phoenix Center raised concerns about the transparency of our research process – while not providing support for its own analysis – the Brattle team corresponded directly with the study's author prior to their review being published, answering all questions asked.

The full Brattle report, "Economic Benefits of Fiber Deployment," is available below.

View Report

EXPERTS INVOLVED

Brattle

PRINCIPAL

Paroma Sanyal
PRINCIPAL

PRACTICES

Telecommunications, Media & Entertainment →

Brattle

Practices
Insights & Events
Work
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Experts
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Privacy Policy

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www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus All 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	0 ms Latency 95 m
1	20	663	192.168.0.1	Archer_AX55	0.7	0.4	0.9	3.0	
2	50	663	96.120.103.145	96.120.103.145	10.8	2.9	12.5	7.5	
3	46	184	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	11.5	4.9	10.3	25.0	
4	47	663	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.8	3.8	14.1	7.1	
5	49	663	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	14.6	7.0	15.1	7.4	
6	75	184	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	14.8	8.9	13.0	40.8	
7	43	184	96.110.34.138	be-2312-pe12.seattle.wa.ibone.comcast.net	15.3	11.3	25.3	23.4	
8	188	663	96.110.34.130	be-2112-pe12.seattle.wa.ibone.comcast.net	14.3	7.2	*	28.4	
9	46	184	108.162.243.33	108.162.243.33	17.2	12.4	14.9	25.0	
10	50	663	162.159.140.229	www.twitter.com	14.5	7.9	13.9	7.5	
	50	663		**Round Trip (ms)**	14.5	7.9	13.9	7.5	Focus: 10:29:48p - 10:57:29p

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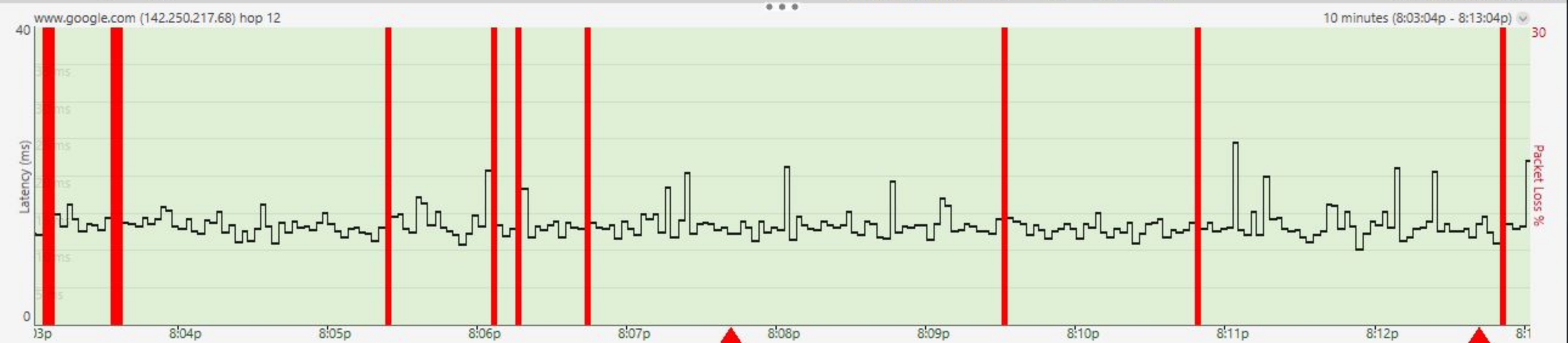
www.google.com / 142.250.217.68 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency (0 ms – 33 ms)
1		239	192.168.0.1	Archer_AX55	0.5	0.3	0.5		
2	7	239	96.120.103.145	96.120.103.145	10.2	4.7	8.9	2.9	
3		9	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	9.8	8.5	8.9		
4		9	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.7	7.0	9.5		
5	6	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.0	5.3	7.8	2.5	
6	5	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.5	6.8	13.3	2.1	
7	6	119	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	14.1	11.1	13.5	5.0	
8		8	96.110.32.226	be-2111-pe11.seattle.wa.ibone.comcast.net	14.0	12.4	13.9		
9	13	128	108.170.255.127	108.170.255.127	14.8	11.4	*	10.2	
10	1	8	142.251.229.135	142.251.229.135	13.6	12.6	13.5	12.5	
11	1	8	142.251.55.197	142.251.55.197	12.8	12.2	12.3	12.5	
12	11	239	142.250.217.68	www.google.com	13.5	10.1	13.2	4.6	
	11	239		**Round Trip (ms)**	13.5	10.1	13.2	4.6	Focus: 8:03:04p - 8:13:04p



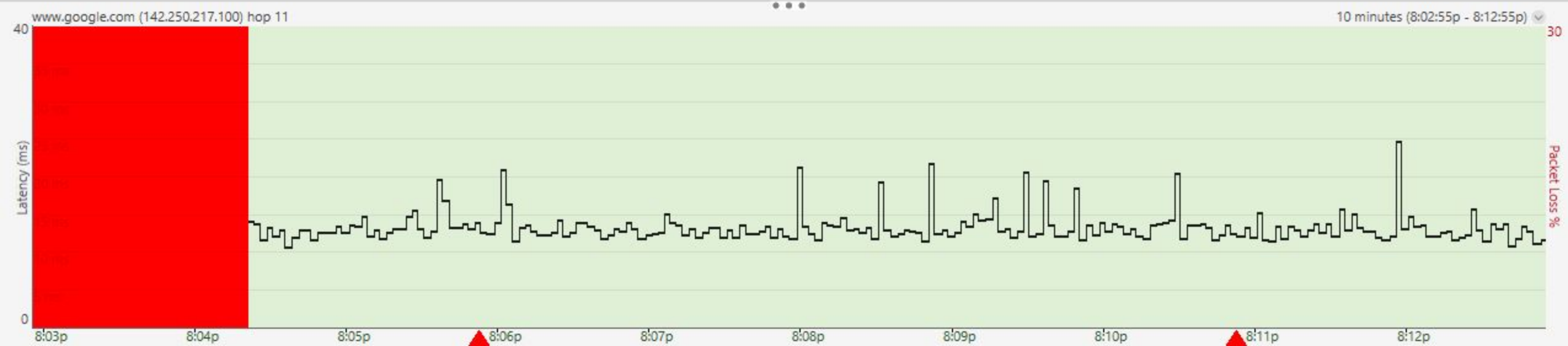
PingPlotter Free

File Edit Tools Help

PingPlotter alerts will notify you instantly of any issues. Upgrade

www.google.com / 142.250.217.100 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency (0 ms – 104 ms)
1	10	239	192.168.0.1	Archer_AX55	0.6	0.4	0.6	4.2	
2	34	239	96.120.103.145	96.120.103.145	9.7	3.0	7.9	14.2	
3	34	119	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.9	7.2	9.8	28.6	
4	34	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.1	4.6	9.9	14.2	
5	34	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.0	7.1	13.1	14.2	
6	51	119	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	14.0	11.2	13.7	42.9	
7	33	119	96.110.34.142	be-2412-pe12.seattle.wa.ibone.comcast.net	14.1	11.1	13.5	27.7	
8	49	169	96.110.34.130	be-2112-pe12.seattle.wa.ibone.comcast.net	13.4	11.1	*	29.0	
9	33	239	108.170.255.127	108.170.255.127	14.2	11.6	13.9	13.8	
10	33	119	142.251.55.201	142.251.55.201	13.4	7.2	16.4	27.7	
11	34	239	142.250.217.100	www.google.com	13.3	10.6	11.1	14.2	
	34	239		**Round Trip (ms)**	13.3	10.6	11.1	14.2	Focus: 8:02:55p - 8:12:55p



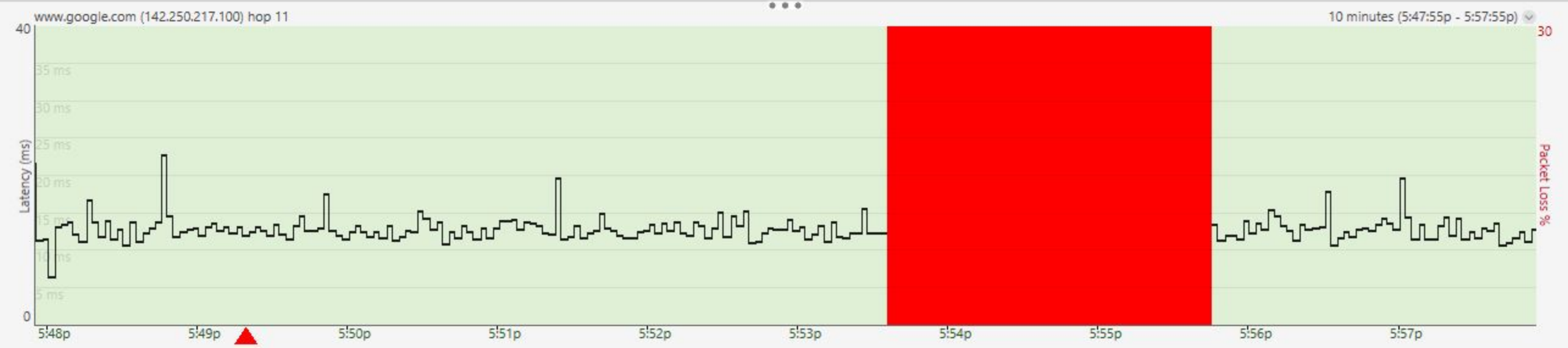
PingPlotter Free

File Edit Tools Help

PingPlotter alerts will notify you instantly of any issues. Upgrade

www.google.com / 142.250.217.100 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency (0 ms – 109 ms)
1	19	239	192.168.0.1	Archer_AX55	0.6	0.4	0.6	7.9	
2	52	239	96.120.103.145	96.120.103.145	9.6	6.9	11.7	21.8	
3	52	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.9	3.9	9.8	21.8	
4	52	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.6	4.4	7.2	21.8	
5	52	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.2	10.8	13.4	21.8	
6	101	205	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.1	9.2	13.3	49.3	
7	52	206	96.110.34.142	be-2412-pe12.seattle.wa.ibone.comcast.net	14.0	10.5	12.6	25.2	
	239		-				*	100.0	
9	52	206	108.170.255.127	108.170.255.127	14.0	8.4	13.4	25.2	
10	52	206	142.251.55.201	142.251.55.201	13.0	6.6	12.5	25.2	
11	52	239	142.250.217.100	www.google.com	12.8	6.5	11.1	21.8	
	52	239		**Round Trip (ms)**	12.8	6.5	11.1	21.8	Focus: 5:47:55p - 5:57:55p



Command Prompt

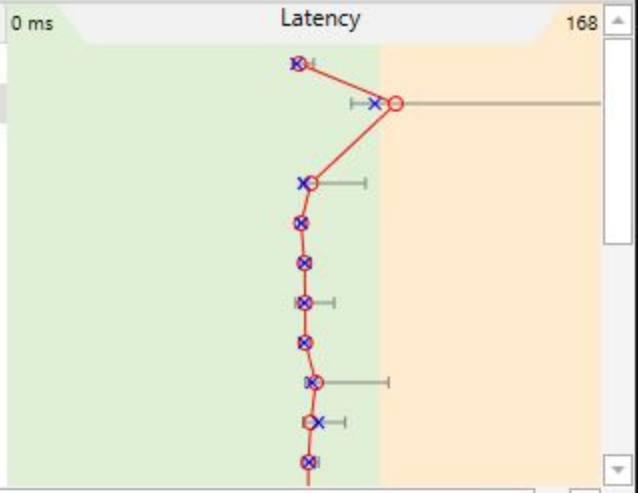
```
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time=1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.0.1:
    Packets: Sent = 100, Received = 100, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Users\Marshall>o
```

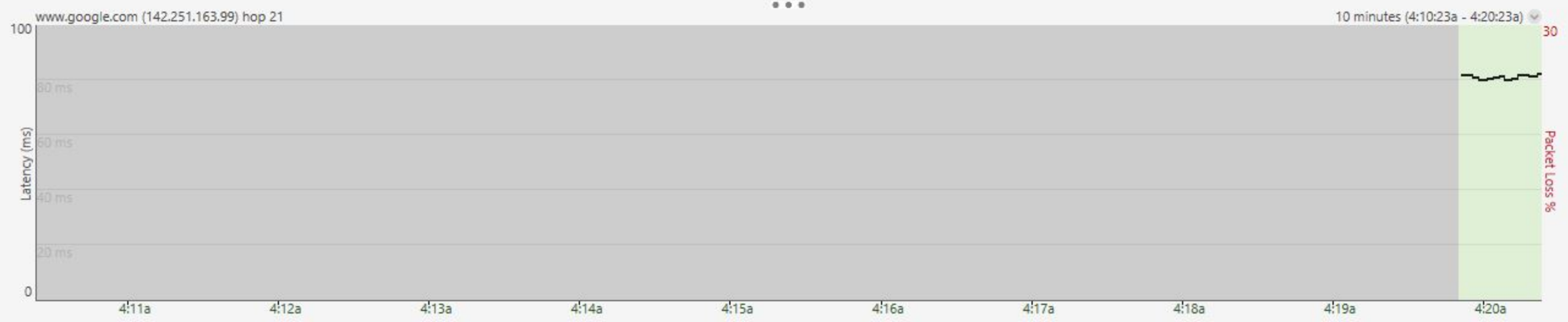
File Edit Tools Help

7/28/2025 4:08 AM ICMP Error 1232: The network location cannot be reached. For information about network troubleshooting, see Windows Help

www.google.com / 142.251.163.99 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		12	10.64.0.1	10.64.0.1	79.3	77.7	78.7	
2		12	103.81.230.1	103.81.230.1	105.6	93.5	99.9	
	12		-				*	100.0
4		12	65.175.48.81	ae9-105.cr1-was1.ip4.gtt.net	82.5	79.7	80.6	
5		12	69.174.23.134	as15169.cr3-was1.ip4.gtt.net	79.9	79.3	79.9	
6		12	192.178.248.33	192.178.248.33	80.8	79.5	80.9	
7		12	192.178.248.38	192.178.248.38	81.0	78.4	80.8	
8		12	216.239.35.162	216.239.35.162	81.0	79.5	80.7	
9		12	142.250.215.195	142.250.215.195	83.9	81.1	82.9	
10		12	172.253.67.44	172.253.67.44	82.5	80.4	84.5	
11		12	142.250.235.95	142.250.235.95	81.8	80.3	82.1	





PingPlotter Free

File Edit Tools Help

Monitor two targets at once and compare the results with PingPlotter Standard. Upgrade

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

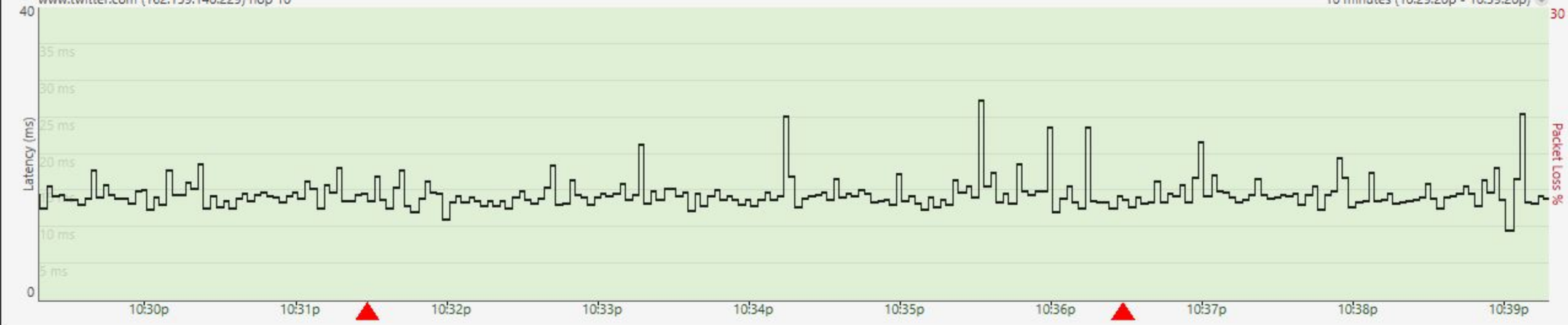
Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.6	
2		239	96.120.103.145	96.120.103.145	11.0	3.6	16.1	
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	11.0	3.8	13.0	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.9	7.2	10.7	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	16.5	11.4	15.2	
6	41	119	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	14.3	11.1	*	34.5
7		119	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	14.6	11.9	17.2	
	239		-				*	100.0
9		119	108.162.243.51	108.162.243.51	20.7	12.1	61.8	
10		239	162.159.140.229	www.twitter.com	14.5	9.5	14.1	
		239		**Round Trip (ms)**	14.5	9.5	14.1	

0 ms Latency 109 ms

Focus: 10:29:20p - 10:39:20p

www.twitter.com (162.159.140.229) hop 10

10 minutes (10:29:20p - 10:39:20p)



PingPlotter Free

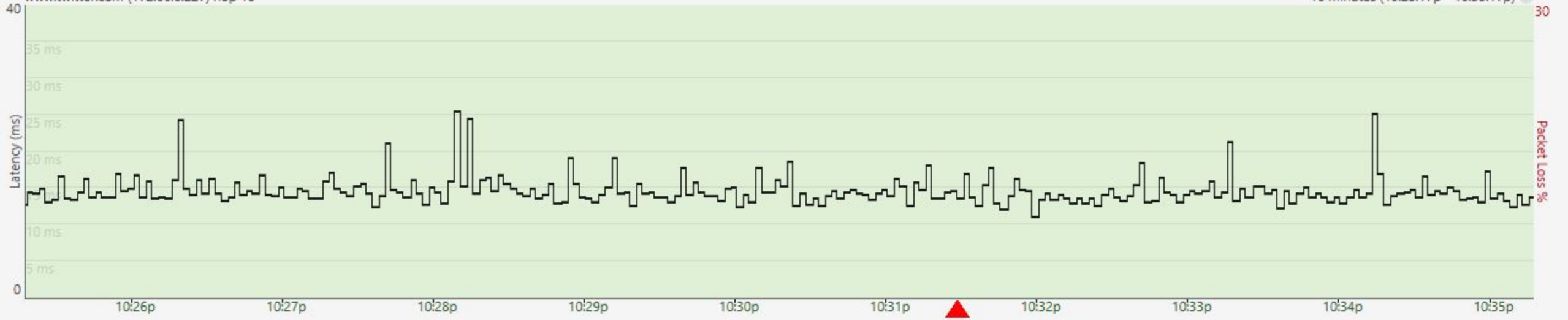
File Edit Tools Help

Monitor hundreds of computers in a central dashboard with PingPlotter Cloud. Try Now

www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	0 ms Latency 89 ms
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.9		
2		239	96.120.103.145	96.120.103.145	11.0	3.6	8.7		
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	11.1	3.8	8.8		
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	11.1	7.2	10.1		
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.3	8.1	13.1		
6		91	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	14.2	10.5	12.8		
7		91	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	14.9	12.1	12.8		
	239		-				*	100.0	
9		91	108.162.243.35	108.162.243.35	16.5	11.8	13.4		
10		239	172.66.0.227	www.twitter.com	14.6	11.0	12.7		
		239		**Round Trip (ms)**	14.6	11.0	12.7		Focus: 10:25:17p - 10:35:17p

www.twitter.com (172.66.0.227) hop 10 — 10 minutes (10:25:17p - 10:35:17p)



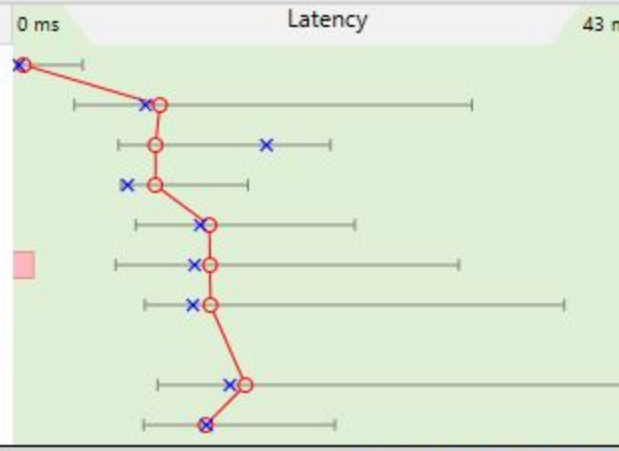
PingPlotter Free

File Edit Tools Help

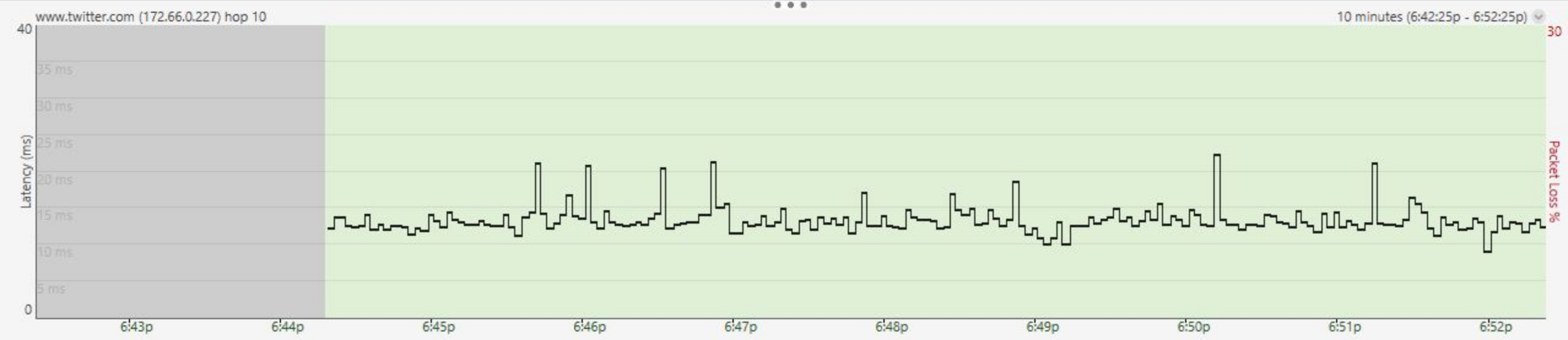
Automatically detect potential network issues with PingPlotter Cloud. Try Now

www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		195	192.168.0.1	Archer_AX55	0.7	0.4	0.4	
2		195	96.120.103.145	96.120.103.145	10.1	4.2	9.1	
3		195	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.8	7.3	17.5	
4		195	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.8	7.4	7.9	
5		195	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.5	8.5	12.9	
6	2	194	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	13.6	7.1	12.5	1.0
7		194	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	13.6	9.1	12.4	
	194		-				*	100.0
9		194	108.162.243.35	108.162.243.35	16.0	10.0	15.0	
10		194	172.66.0.227	www.twitter.com	13.3	9.0	13.3	
		194		**Round Trip (ms)**	13.3	9.0	13.3	



Focus: 6:44:17p - 6:52:25p



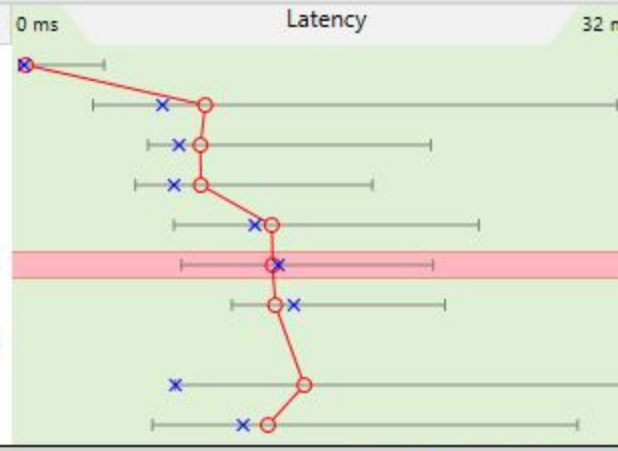
PingPlotter Free

File Edit Tools Help

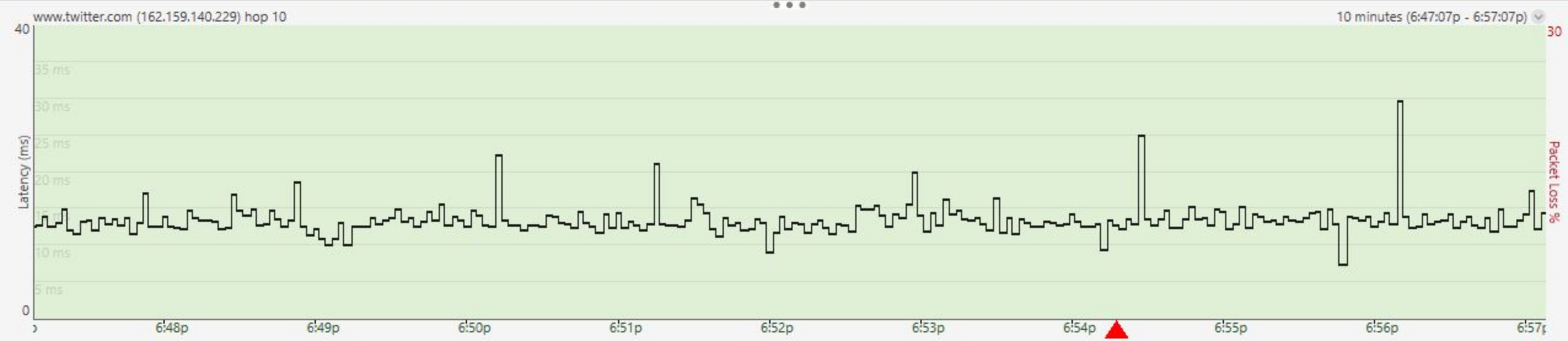
Automatically detect potential network issues with PingPlotter Cloud. Try Now

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.6	
2		239	96.120.103.145	96.120.103.145	10.1	4.2	7.9	
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.8	7.1	8.7	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.9	6.4	8.5	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.6	8.5	12.7	
6	23	67	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.6	8.8	13.9	34.3
7		68	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	13.7	11.5	14.7	
	239		-				*	100.0
9		68	108.162.243.51	108.162.243.51	15.3	8.5	8.5	
10		239	162.159.140.229	www.twitter.com	13.4	7.3	12.1	
		239		**Round Trip (ms)**	13.4	7.3	12.1	



Focus: 6:47:07p - 6:57:07p



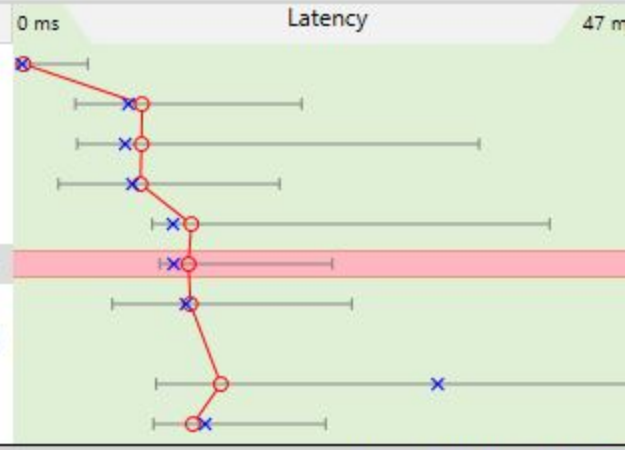
PingPlotter Free

File Edit Tools Help

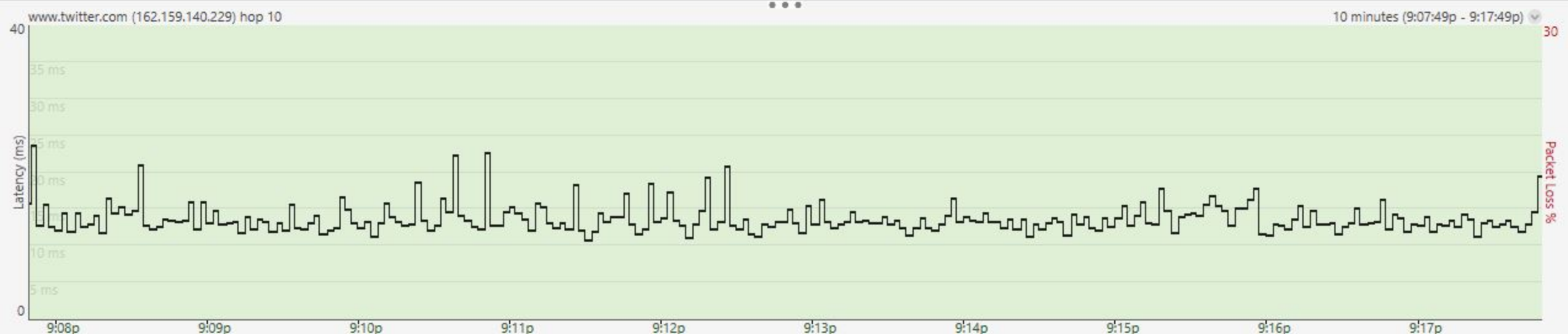
Automatically detect potential network issues with PingPlotter Cloud. Try Now

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.8	0.3	0.7	
2		239	96.120.103.145	96.120.103.145	9.7	4.7	8.7	
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.7	4.8	8.5	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.6	3.4	9.0	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.4	10.5	12.1	
6	82	239	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.2	11.1	12.1	34.3
7		239	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	13.4	7.5	13.1	
	239		-				*	100.0
9		239	108.162.243.51	108.162.243.51	15.7	10.8	32.0	
10		239	162.159.140.229	www.twitter.com	13.6	10.6	14.5	
		239		**Round Trip (ms)**	13.6	10.6	14.5	



Focus: 9:07:49p - 9:17:49p



PingPlotter Free

File Edit Tools Help

Trace hundreds of targets at once with PingPlotter Professional. Upgrade

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	0 ms Latency 2780 ms
1		239	192.168.0.1	Archer_AX55	0.8	0.5	0.7		
2	1	239	96.120.103.145	96.120.103.145	11.8	3.8	8.6	0.4	
3	1	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	11.6	5.5	8.7	0.4	
4	1	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	11.3	3.3	8.1	0.4	
5	1	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.1	10.6	12.0	0.4	
6	39	116	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.7	11.0	12.0	33.6	
7	1	119	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	16.1	11.1	11.1	0.8	
	239		-				*	100.0	
9		119	108.162.243.51	108.162.243.51	40.3	11.3	12.6		
10	1	239	162.159.140.229	www.twitter.com	16.1	10.0	12.1	0.4	
	1	239		**Round Trip (ms)**	16.1	10.0	12.1	0.4	Focus: 9:40:34p - 9:50:34p

www.twitter.com (162.159.140.229) hop 10 — 10 minutes (9:40:34p - 9:50:34p)

9:50:35 PM

Wednesday, July 30, 2025

July 2025

Su	Mo	Tu	We	Th	Fr	Sa
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

Today

Add an event or reminder

No events

PingPlotter Free

File Edit Tools Help

Trace hundreds of targets at once with PingPlotter Professional. Upgrade

www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1	18	239	192.168.0.1	Archer_AX55	0.8	0.4	0.9	7.5
2	22	239	96.120.103.145	96.120.103.145	9.3	7.1	*	9.2
3	23	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	9.4	6.9	*	9.6
4	23	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.2	3.5	*	9.6
5	23	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	12.9	7.6	*	9.6
6	26	239	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	13.0	10.5	*	10.9
7	23	239	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	13.0	8.0	*	9.6
	239		-				*	100.0
9	23	239	108.162.243.35	108.162.243.35	14.7	10.7	*	9.6
10	23	239	172.66.0.227	www.twitter.com	12.8	10.6	*	9.6
	23	239		**Round Trip (ms)**	12.8	10.6	*	9.6

0 ms Latency 42 ms

Focus: 1:22:09a - 1:32:09a

1:32:09 AM

Thursday, July 31, 2025

July 2025

Su	Mo	Tu	We	Th	Fr	Sa
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Trace hundreds of targets at once with PingPlotter Professional. Upgrade

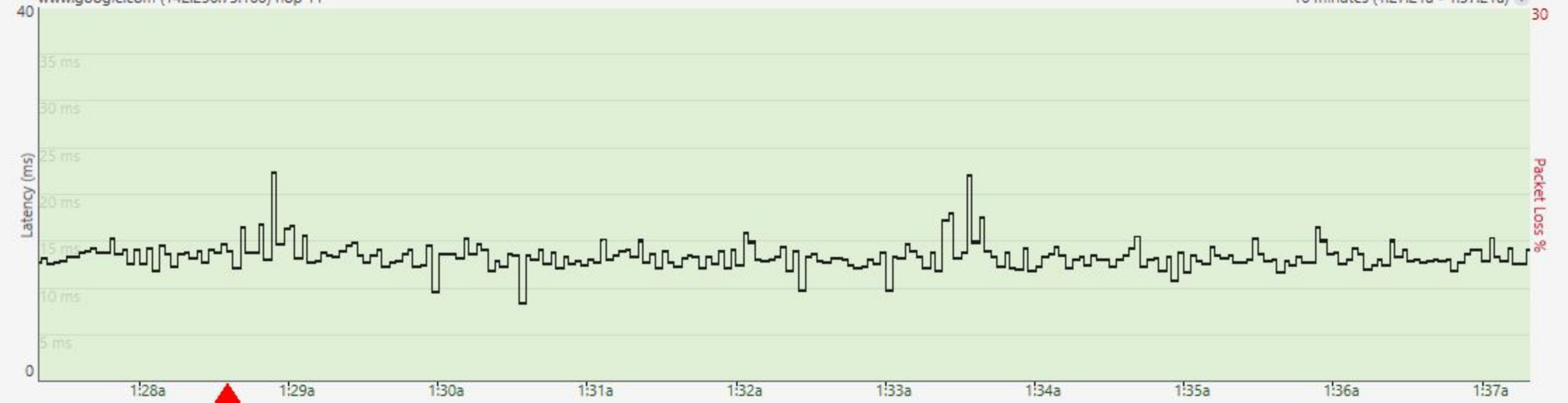
www.google.com / 142.250.73.100 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.5	
2		239	96.120.103.145	96.120.103.145	10.0	4.7	10.2	
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	10.2	8.0	11.2	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.2	3.8	9.9	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.7	11.4	14.2	
6	1	239	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	13.8	8.0	13.1	0.4
7		210	96.110.34.130	be-2112-pe12.seattle.wa.ibone.comcast.net	13.6	7.4	14.1	
	239	239	96.110.32.238	be-2411-pe11.seattle.wa.ibone.comcast.net			*	100.0
9		210	192.178.105.141	192.178.105.141	13.5	11.0	16.3	
10		210	142.251.64.87	142.251.64.87	13.5	8.9	14.1	
11		239	142.250.73.100	www.google.com	13.4	8.4	12.6	
		239		**Round Trip (ms)**	13.4	8.4	12.6	

0 ms Latency 38 ms

Focus: 1:27:21a - 1:37:21a

www.google.com (142.250.73.100) hop 11 10 minutes (1:27:21a - 1:37:21a)



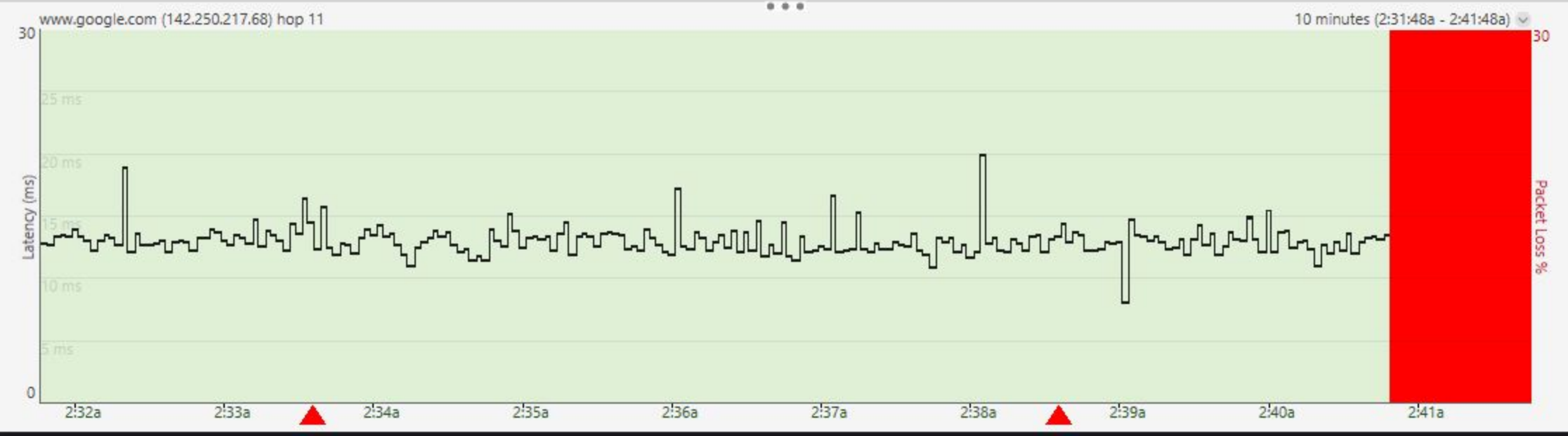
PingPlotter Free

File Edit Tools Help

Test new hire connections before remote work begins with PingPlotter Cloud. Try Now

www.google.com / 142.250.217.68 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency (0 ms – 24 ms)
1	18	239	192.168.0.1	Archer_AX55	0.7	0.5	0.8	7.5	
2	23	239	96.120.103.145	96.120.103.145	9.8	8.0	*	9.6	
3	23	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	9.9	7.4	*	9.6	
4	23	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.9	4.6	*	9.6	
5	23	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.2	11.1	*	9.6	
6	32	239	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	13.5	11.7	*	13.4	
7	40	239	96.110.32.226	be-2111-pe11.seattle.wa.ibone.comcast.net	13.5	9.6	*	16.7	
	239	239	96.110.32.238	be-2411-pe11.seattle.wa.ibone.comcast.net			*	100.0	
9	23	119	142.251.229.135	142.251.229.135	13.7	12.0	*	19.3	
10	23	119	142.251.55.197	142.251.55.197	12.9	11.5	*	19.3	
11	23	239	142.250.217.68	www.google.com	13.0	8.1	*	9.6	
	23	239		**Round Trip (ms)**	13.0	8.1	*	9.6	Focus: 2:31:48a - 2:41:48a



PingPlotter Free

File Edit Tools Help

Respond to problems faster with alerts. Upgrade

www.google.com / 142.250.217.68 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.7	
2		239	96.120.103.145	96.120.103.145	10.4	3.9	7.6	
3		49	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.ne	10.3	7.9	9.3	
4		49	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.5	8.4	17.3	
5		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.3	4.4	11.8	
6		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	14.9	7.7	13.8	
7	7	116	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	13.9	8.0	20.3	6.0
8	7	49	96.110.32.226	be-2111-pe11.seattle.wa.ibone.comcast.net	13.9	10.3	13.4	14.3
9	48	239	192.178.105.141	192.178.105.141	14.0	11.5	*	20.1
10		49	142.251.229.135	142.251.229.135	14.1	9.4	14.9	
11		49	142.251.55.197	142.251.55.197	13.4	11.3	13.0	
12		239	142.250.217.68	www.google.com	13.5	10.7	13.9	
		239		**Round Trip (ms)**	13.5	10.7	13.9	

0 ms Latency 165 r

Focus: 5:50:05p - 6:00:05

www.google.com (142.250.217.68) hop 12 10 minutes (5:50:05p - 6:00:05p)

40 35 ms 30 ms 25 ms 20 ms 10 ms 5 ms 0

Latency (ms) Packet Loss %

30

5:51p 5:52p 5:53p 5:54p 5:55p 5:56p 5:57p 5:58p 5:59p

6:00:06 PM

Friday, August 1, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud for remote network monitoring. Try Now

www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		8	192.168.0.1	Archer_AX55	4.3	0.6	0.6	
2		8	96.120.103.145	96.120.103.145	12.5	7.1	7.1	
3		8	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	14.5	9.8	11.7	
4		8	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	15.9	10.0	10.0	
5		8	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	18.4	11.6	12.2	
6		8	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	18.2	13.1	30.1	
7		8	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	16.8	9.4	16.4	
	8		-				*	100.0
9		8	108.162.243.35	108.162.243.35	19.9	12.7	16.7	
10		8	172.66.0.227	www.twitter.com	16.5	11.6	11.8	
		8		**Round Trip (ms)**	16.5	11.6	11.8	

Latency 0 ms 33 ms

Focus: 12:21:16a - 12:21:33a

www.twitter.com (172.66.0.227) hop 10

10 minutes (12:11:33a - 12:21:33a)

PingPlotter Free

File Edit Tools Help

Monitor hundreds of computers in a central dashboard with PingPlotter Cloud. Try Now

www.google.com / 142.251.215.228 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		42	192.168.0.1	Archer_AX55	0.7	0.5	0.7	
2		42	96.120.103.145	96.120.103.145	11.9	4.3	10.2	
3		42	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	11.6	8.4	11.4	
4		42	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	11.3	4.6	10.2	
5		42	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.5	12.0	14.4	
6	6	41	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	15.9	11.8	12.7	14.6
7	8	41	96.110.32.238	be-2411-pe11.seattle.wa.ibone.comcast.net	15.9	11.8	13.0	19.5
	42		-				*	100.0
9		42	142.251.70.97	142.251.70.97	15.7	12.4	14.2	
10		42	216.239.56.223	216.239.56.223	14.6	8.8	13.5	
11		42	142.251.215.228	www.google.com	15.2	12.0	13.3	
		42		**Round Trip (ms)**	15.2	12.0	13.3	

0 ms Latency 74 m

Focus: 12:23:35a - 12:25:17a

www.google.com (142.251.215.228) hop 11

10 minutes (12:15:17a - 12:25:17a)

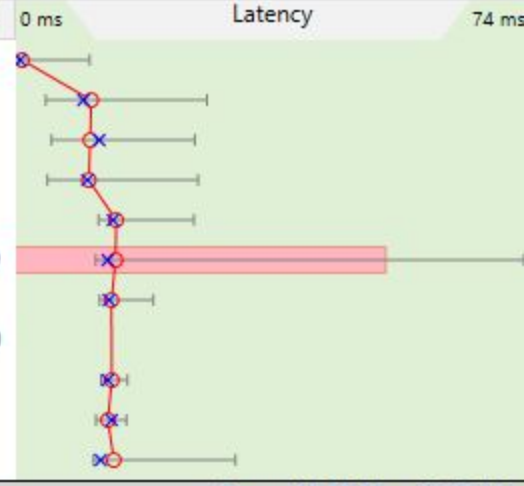
PingPlotter Free

File Edit Tools Help

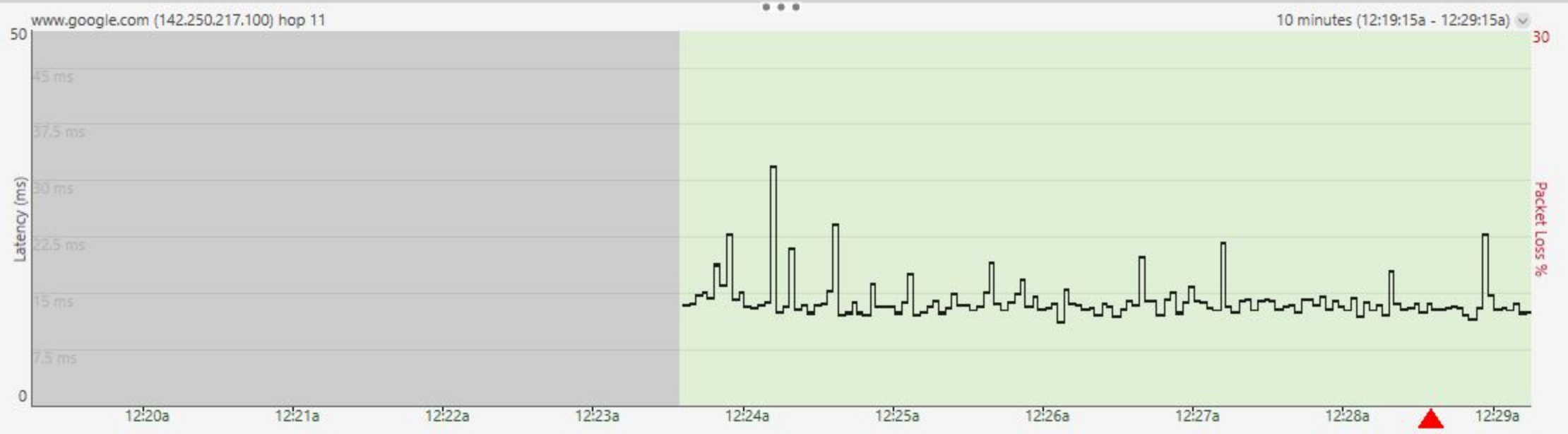
Try PingPlotter Cloud for remote network monitoring. Try Now

www.google.com / 142.250.217.100 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		137	192.168.0.1	Archer_AX55	0.9	0.4	0.6	
2		137	96.120.103.145	96.120.103.145	10.9	4.3	9.8	
3		137	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	10.8	5.2	12.1	
4		137	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.6	4.6	10.4	
5		137	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	14.5	12.0	14.1	
6	30	137	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	14.5	11.6	13.3	21.9
7		16	96.110.34.142	be-2412-pe12.seattle.wa.ibone.comcast.net	13.9	12.2	13.5	
	137		-				*	100.0
9		16	108.170.255.127	108.170.255.127	13.9	12.3	13.3	
10		16	142.251.55.201	142.251.55.201	13.3	11.6	13.9	
11		137	142.250.217.100	www.google.com	14.2	11.3	12.3	
		137		**Round Trip (ms)**	14.2	11.3	12.3	



Focus: 12:23:35a - 12:29:15a



PingPlotter Free

File Edit Tools Help

Need some friendly advice to fix a problem? Try Now

www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	0 ms Latency 81 ms
1		239	192.168.0.1	Archer_AX55	0.8	0.5	0.6		
2		239	96.120.103.145	96.120.103.145	9.0	7.2	9.8		
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	9.0	6.5	8.8		
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.0	6.9	10.4		
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.6	10.4	12.1		
6		180	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	12.9	10.3	12.4		
7		180	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	13.0	8.5	12.5		
	239		-				*	100.0	
9		180	108.162.243.35	108.162.243.35	17.0	11.0	13.2		
10		239	172.66.0.227	www.twitter.com	12.5	9.0	11.6		
		239		**Round Trip (ms)**	12.5	9.0	11.6		Focus: 1:11:59a - 1:21:59a

1:22:00 AM

Thursday, July 31, 2025

July 2025

Su	Mo	Tu	We	Th	Fr	Sa
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

Today

Add an event or reminder

No events

Hide agenda

Command Prompt - ping 192.168.0.1 -n 100

```
'-t' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\Marshall>ping 192.168.0.1 -n 100

Pinging 192.168.0.1 with 32 bytes of data:
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
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Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
```

PingPlotter Free

File Edit Tools Help

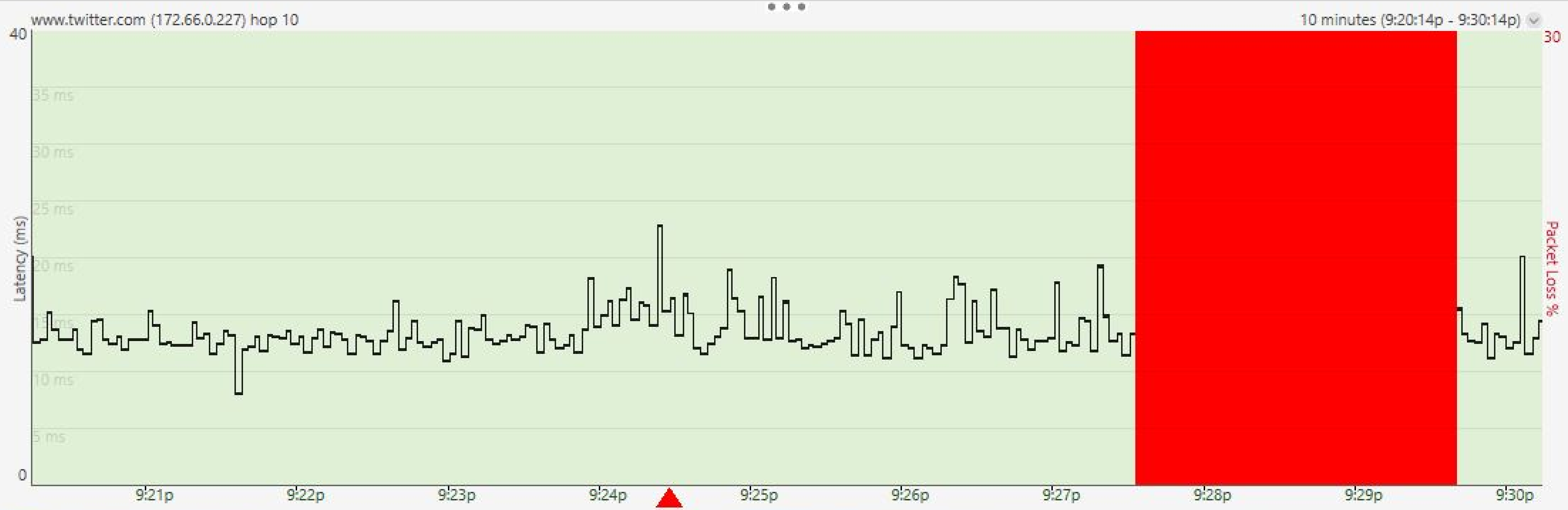
Try PingPlotter Cloud to share live, read-only data with your customers. Try Now

www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1	19	239	192.168.0.1	Archer_AX55	0.8	0.5	0.6	7.9
2	51	239	96.120.103.145	96.120.103.145	9.7	3.4	9.1	21.3
3	51	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	9.7	5.2	9.1	21.3
4	51	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.9	3.6	9.2	21.3
5	51	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.5	10.6	12.8	21.3
6	51	138	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	13.9	11.1	13.3	37.0
7	51	138	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	13.8	11.3	13.2	37.0
	239		-				*	100.0
9	51	138	108.162.243.35	108.162.243.35	15.2	11.2	17.7	37.0
10	51	239	172.66.0.227	www.twitter.com	13.5	8.0	13.0	21.3
	51	239		Round Trip (ms)	13.5	8.0	13.0	21.3

Latency 0 ms 122 ms

Focus: 9:20:14p - 9:30:14p



9:30:15 PM

Wednesday, July 30, 2025

July 2025

Su	Mo	Tu	We	Th	Fr	Sa
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

Today

Command Prompt

```
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
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Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.0.1:
    Packets: Sent = 100, Received = 100, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Users\Marshall>_
```

PingPlotter Free

File Edit Tools Help

Trace hundreds of targets at once with PingPlotter Professional. Upgrade

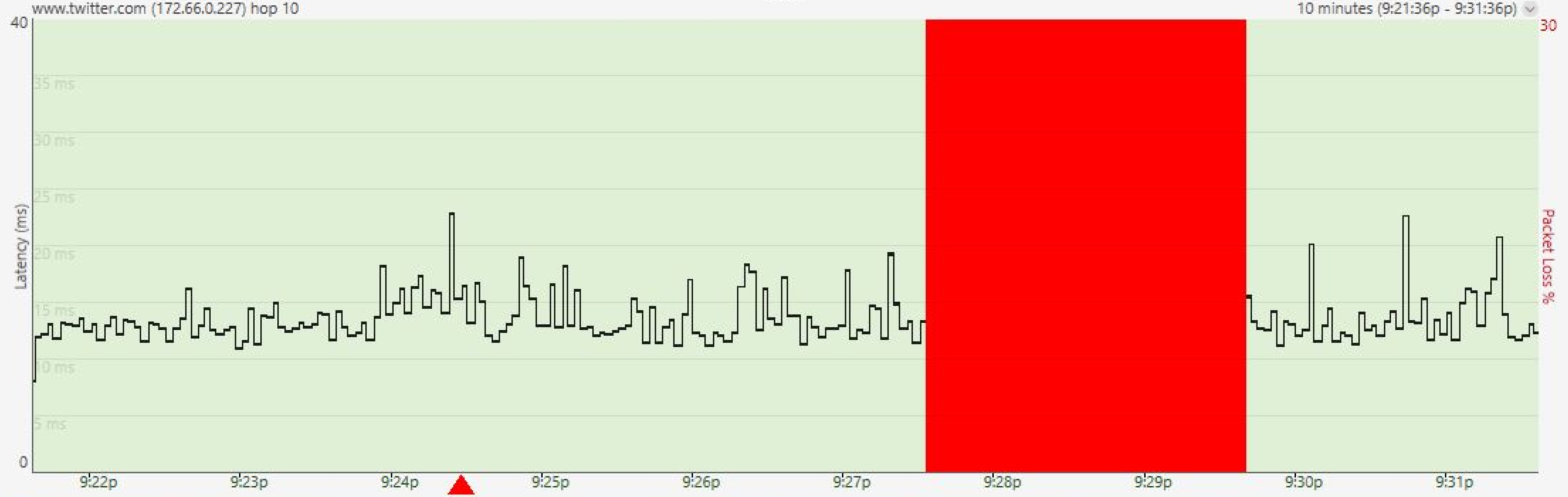
www.twitter.com / 172.66.0.227 — Interval 2.5 seconds — Focus Auto — 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1	19	239	192.168.0.1	Archer_AX55	0.8	0.5	0.7	7.9
2	51	239	96.120.103.145	96.120.103.145	10.0	3.4	16.4	21.3
3	52	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	10.0	6.3	9.1	21.8
4	51	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.0	3.6	8.2	21.3
5	51	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.6	10.6	15.2	21.3
6	51	171	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	13.9	11.1	14.6	29.8
7	51	171	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	13.9	10.2	18.7	29.8
	239		-				*	100.0
9	51	171	108.162.243.35	108.162.243.35	15.3	11.2	21.9	29.8
10	51	239	172.66.0.227	www.twitter.com	13.7	10.9	13.1	21.3
	51	239		**Round Trip (ms)**	13.7	10.9	13.1	21.3

Latency 0 ms – 37 ms

Focus: 9:21:36p - 9:31:36p

www.twitter.com (172.66.0.227) hop 10 — 10 minutes (9:21:36p - 9:31:36p)



9:31:37 PM

Wednesday, July 30, 2025

July 2025

Su	Mo	Tu	We	Th	Fr	Sa
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

Today

PingPlotter Free

File Edit Tools Help

Test new hire connections before remote work begins with PingPlotter Cloud. Try Now

www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

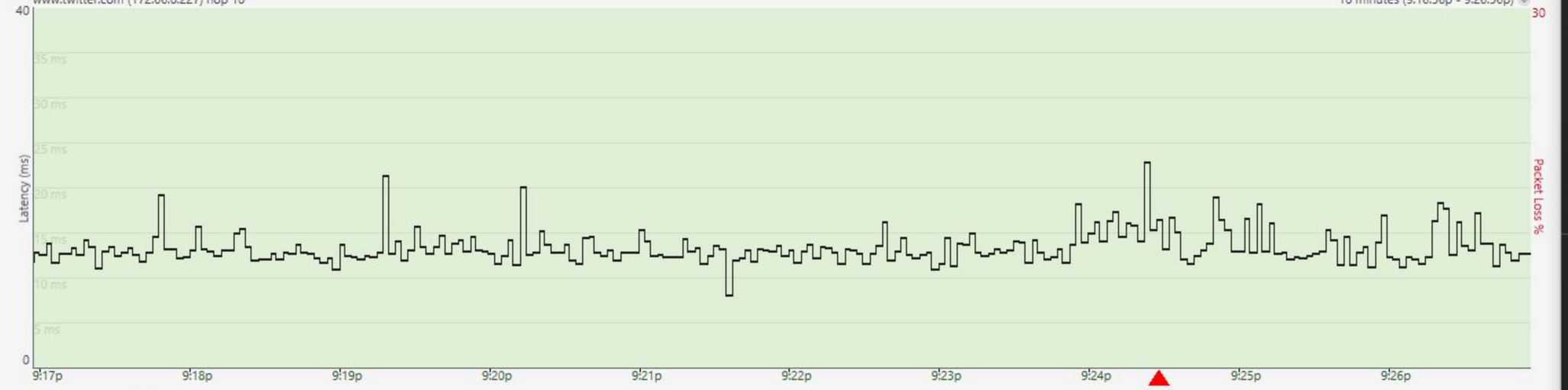
Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.8	0.5	1.0	
2		239	96.120.103.145	96.120.103.145	9.6	3.4	8.6	
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.6	5.2	8.8	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.8	7.1	8.2	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.1	10.6	13.6	
6		59	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	13.9	11.4	13.7	
7		59	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	14.1	11.3	13.2	
	239		-				*	100.0
9		59	108.162.243.35	108.162.243.35	15.5	11.2	16.9	
10		239	172.66.0.227	www.twitter.com	13.4	8.0	12.7	
		239		**Round Trip (ms)**	13.4	8.0	12.7	

Latency 0 ms 122 ms

Focus: 9:16:56p - 9:26:56p

www.twitter.com (172.66.0.227) hop 10

10 minutes (9:16:56p - 9:26:56p)



9:26:59 PM

Wednesday, July 30, 2025

July 2025

Su	Mo	Tu	We	Th	Fr	Sa
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

Today

Add an event or reminder

No events

Hide agenda

Command Prompt

```
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
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Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time=2ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.0.1:
    Packets: Sent = 100, Received = 100, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 2ms, Average = 0ms

C:\Users\Marshall>
```

PingPlotter Free

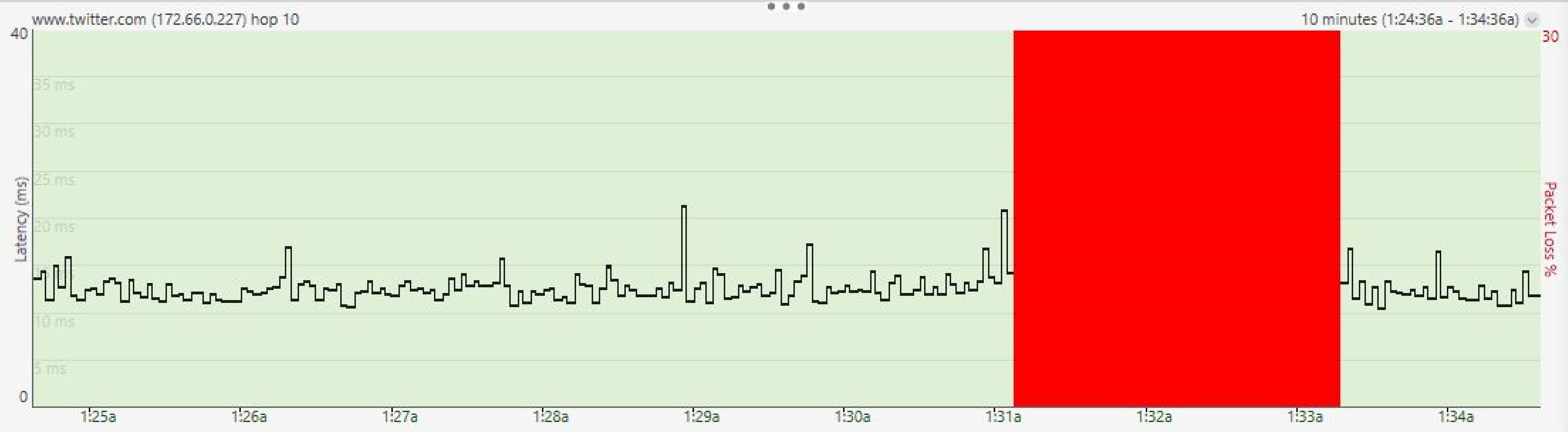
File Edit Tools Help

Need more power? Upgrade PingPlotter today! Upgrade

www.twitter.com / 172.66.0.227 — Interval 2.5 seconds — Focus Auto — 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1	19	239	192.168.0.1	Archer_AX55	0.8	0.4	0.8	7.9
2	52	239	96.120.103.145	96.120.103.145	9.2	7.1	7.9	21.8
3	51	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	9.2	6.9	7.7	21.3
4	51	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.2	3.5	7.6	21.3
5	51	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	12.7	7.6	12.5	21.3
6	53	239	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	12.8	11.0	13.5	22.2
7	51	239	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	12.8	8.0	11.9	21.3
	239		-				*	100.0
9	51	239	108.162.243.35	108.162.243.35	14.8	10.7	13.8	21.3
10	52	239	172.66.0.227	www.twitter.com	12.6	10.5	11.8	21.8
	52	239		**Round Trip (ms)**	12.6	10.5	11.8	21.8

Latency: 0 ms – 42 ms — Focus: 1:24:36a - 1:34:36a



1:34:39 AM

Thursday, July 31, 2025

July 2025

Su	Mo	Tu	We	Th	Fr	Sa
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

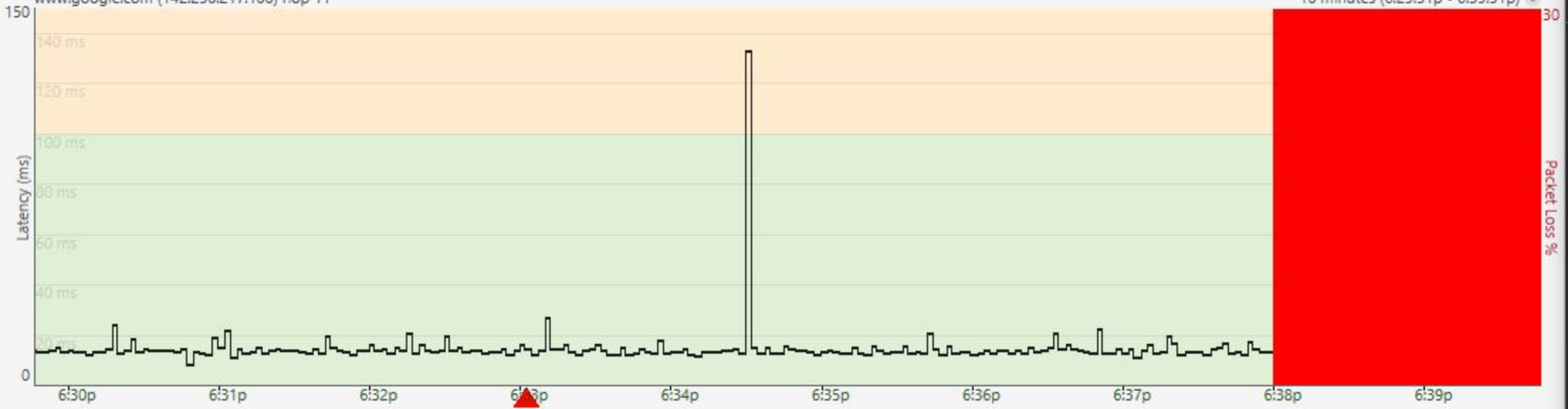
File Edit Tools Help

Monitor two targets at once and compare the results with PingPlotter Standard. Upgrade

www.google.com / 142.250.217.100 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency (0 ms … 136 ms)
1	19	239	192.168.0.1	Archer_AX55	0.8	0.4	0.9	7.9	
2	43	238	96.120.103.145	96.120.103.145	11.7	4.3	*	18.1	
3	43	238	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	11.4	5.7	*	18.1	
4	43	238	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	11.1	4.7	*	18.1	
5	43	238	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.9	6.7	*	18.1	
6	77	161	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	14.8	12.2	*	47.8	
7	43	162	96.110.34.142	be-2412-pe12.seattle.wa.ibone.comcast.net	15.1	12.2	*	26.5	
	239	239	96.110.32.238	be-2411-pe11.seattle.wa.ibone.comcast.net			*	100.0	
9	43	162	108.170.255.127	108.170.255.127	15.1	9.7	*	26.5	
10	43	162	142.251.55.201	142.251.55.201	13.7	8.7	*	26.5	
11	43	239	142.250.217.100	www.google.com	14.7	8.4	*	18.0	
	43	239		**Round Trip (ms)**	14.7	8.4	*	18.0	Focus: 6:29:51p - 6:39:51p

www.google.com (142.250.217.100) hop 11 — 10 minutes (6:29:51p - 6:39:51p)



6:39:51 PM
Friday, August 1, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

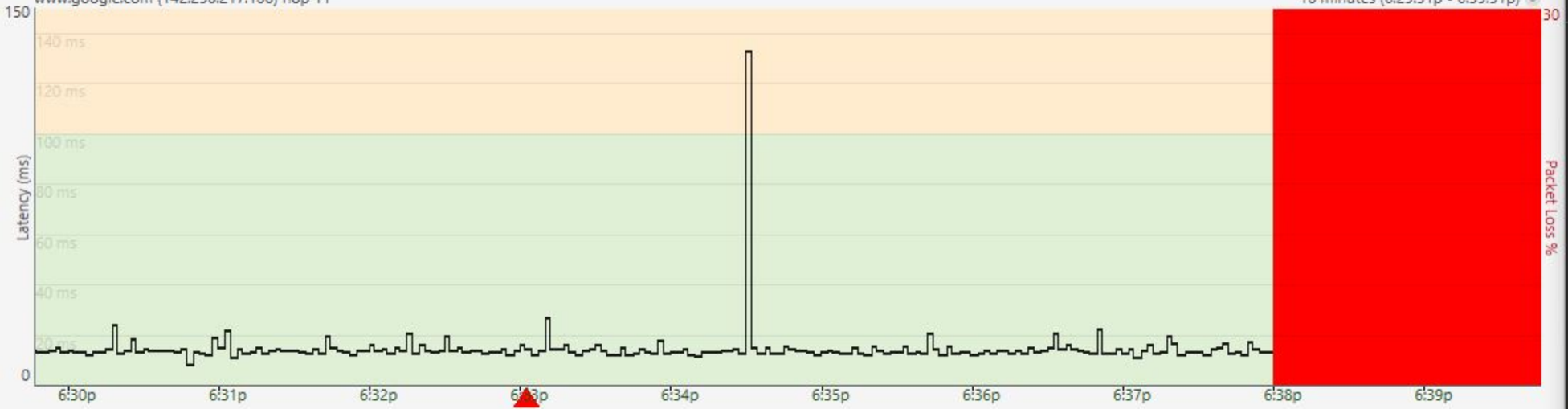
File Edit Tools Help

Monitor two targets at once and compare the results with PingPlotter Standard. Upgrade

www.google.com / 142.250.217.100 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency (0 ms … 136 ms)
1	19	239	192.168.0.1	Archer_AX55	0.8	0.4	0.9	7.9	
2	43	238	96.120.103.145	96.120.103.145	11.7	4.3	*	18.1	
3	43	238	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	11.4	5.7	*	18.1	
4	43	238	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	11.1	4.7	*	18.1	
5	43	238	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.9	6.7	*	18.1	
6	77	161	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	14.8	12.2	*	47.8	
7	43	162	96.110.34.142	be-2412-pe12.seattle.wa.ibone.comcast.net	15.1	12.2	*	26.5	
	239	239	96.110.32.238	be-2411-pe11.seattle.wa.ibone.comcast.net			*	100.0	
9	43	162	108.170.255.127	108.170.255.127	15.1	9.7	*	26.5	
10	43	162	142.251.55.201	142.251.55.201	13.7	8.7	*	26.5	
11	43	239	142.250.217.100	www.google.com	14.7	8.4	*	18.0	
	43	239		**Round Trip (ms)**	14.7	8.4	*	18.0	Focus: 6:29:51p - 6:39:51p

www.google.com (142.250.217.100) hop 11 — 10 minutes (6:29:51p - 6:39:51p)



6:39:51 PM
Friday, August 1, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud to collaborate better with your team. Try Now

www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	0 ms Latency 75 ms
1		239	192.168.0.1	Archer_AX55	0.7	0.5	0.6		
2		239	96.120.103.145	96.120.103.145	10.2	4.2	10.6		
3		239	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.ne	10.3	3.3	10.6		
4		239	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.1	6.8	11.1		
5		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.3	5.7	9.2		
6		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.3	8.0	13.5		
7		102	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	14.1	9.2	13.6		
8		102	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	14.1	8.9	13.7		
	239		-				*	100.0	
10		102	108.162.243.35	108.162.243.35	15.7	12.3	17.1		
11		239	172.66.0.227	www.twitter.com	13.9	8.2	12.6		
		239		**Round Trip (ms)**	13.9	8.2	12.6		Focus: 1:09:32p - 1:19:32p

1:19:34 PM

Saturday, August 2, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud to collaborate better with your team. Try Now

www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	0 ms Latency 75 ms
1		239	192.168.0.1	Archer_AX55	0.7	0.5	0.6		
2		239	96.120.103.145	96.120.103.145	10.2	4.2	10.6		
3		239	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.ne	10.3	3.3	10.6		
4		239	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.1	6.8	11.1		
5		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.3	5.7	9.2		
6		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.3	8.0	13.5		
7		102	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	14.1	9.2	13.6		
8		102	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	14.1	8.9	13.7		
	239		-				*	100.0	
10		102	108.162.243.35	108.162.243.35	15.7	12.3	17.1		
11		239	172.66.0.227	www.twitter.com	13.9	8.2	12.6		
		239		**Round Trip (ms)**	13.9	8.2	12.6		Focus: 1:09:32p - 1:19:32p

1:19:34 PM

Saturday, August 2, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Automatically detect potential network issues with PingPlotter Cloud. Try Now

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

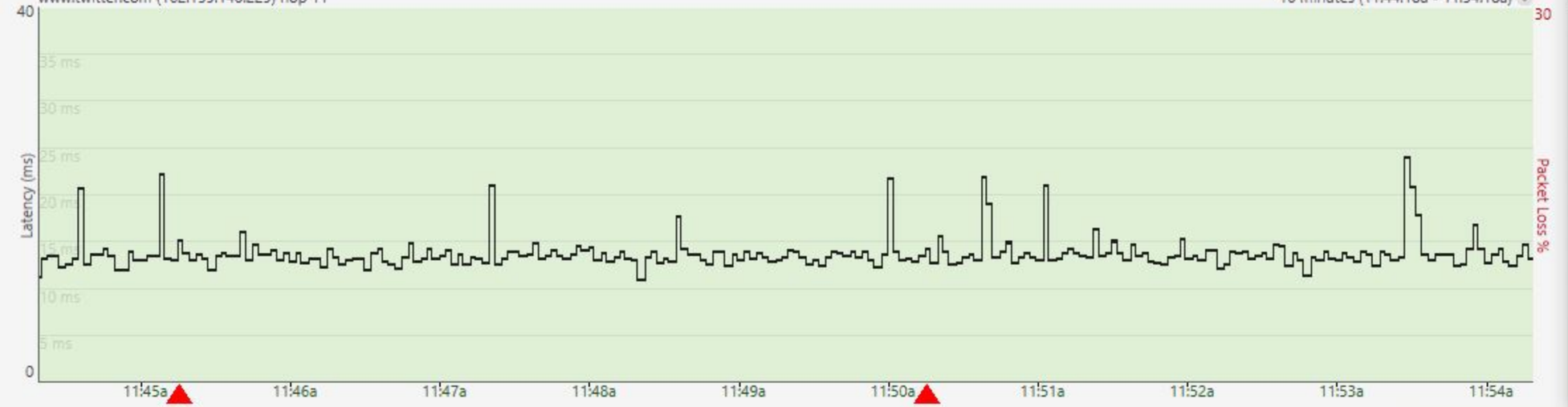
Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.5	0.8	
2		239	96.120.103.145	96.120.103.145	10.0	6.3	10.1	
3		239	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.ne	10.2	4.3	9.8	
4		239	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.1	5.5	10.1	
5		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.0	3.7	9.4	
6		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.8	9.1	12.5	
7	31	119	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.9	11.3	*	26.1
8		119	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	13.9	10.9	12.9	
	239		-				*	100.0
10		119	108.162.243.51	108.162.243.51	16.2	11.8	14.7	
11		239	162.159.140.229	www.twitter.com	13.7	10.9	14.7	
		239		**Round Trip (ms)**	13.7	10.9	14.7	

0 ms Latency 57 ms

Focus: 11:44:18a - 11:54:18a

www.twitter.com (162.159.140.229) hop 11

10 minutes (11:44:18a - 11:54:18a)



11:54:20 AM

Saturday, August 2, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Automatically detect potential network issues with PingPlotter Cloud. Try Now

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

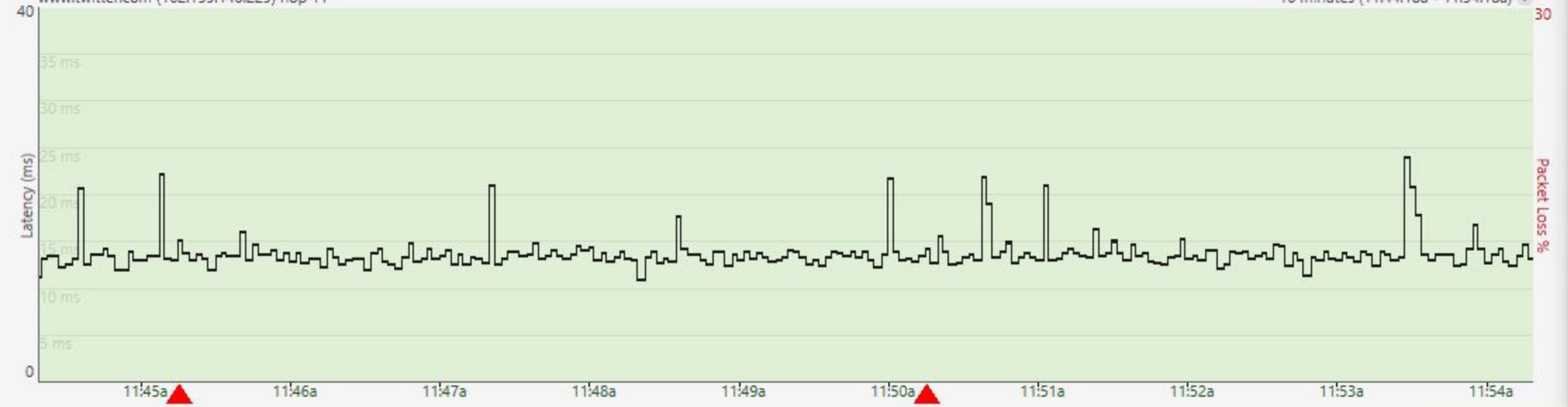
Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.5	0.8	
2		239	96.120.103.145	96.120.103.145	10.0	6.3	10.1	
3		239	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.ne	10.2	4.3	9.8	
4		239	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.1	5.5	10.1	
5		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.0	3.7	9.4	
6		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.8	9.1	12.5	
7	31	119	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.9	11.3	*	26.1
8		119	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	13.9	10.9	12.9	
	239		-				*	100.0
10		119	108.162.243.51	108.162.243.51	16.2	11.8	14.7	
11		239	162.159.140.229	www.twitter.com	13.7	10.9	14.7	
		239		**Round Trip (ms)**	13.7	10.9	14.7	

0 ms Latency 57 ms

Focus: 11:44:18a - 11:54:18a

www.twitter.com (162.159.140.229) hop 11

10 minutes (11:44:18a - 11:54:18a)



11:54:20 AM

Saturday, August 2, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Respond to problems faster with alerts. Upgrade

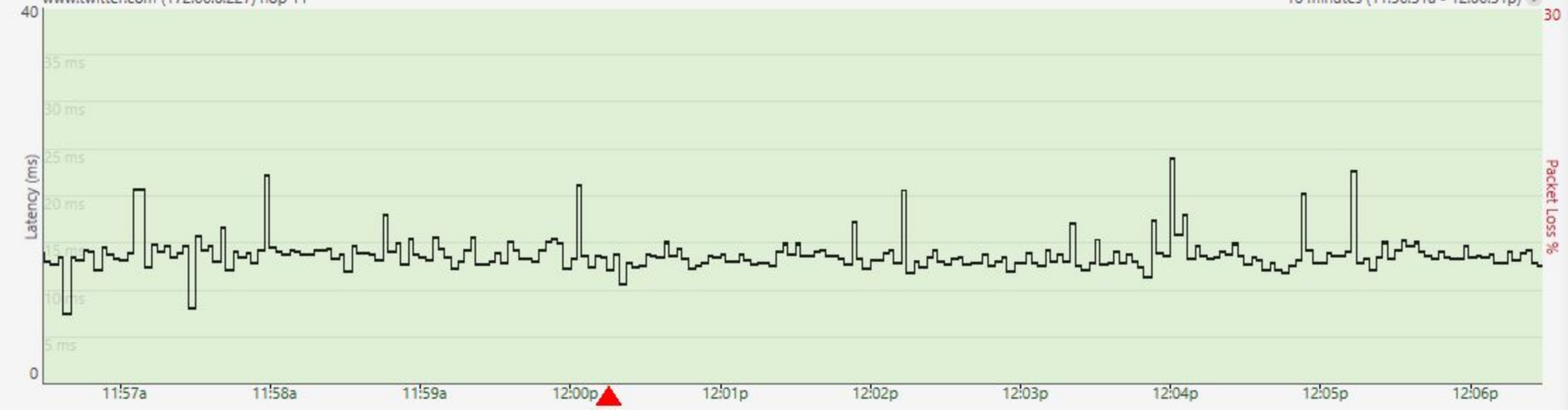
www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.5	0.7	
2		239	96.120.103.145	96.120.103.145	10.0	5.3	10.0	
3		239	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.ne	9.9	5.3	9.6	
4		239	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.1	4.6	9.9	
5		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.2	6.3	10.1	
6		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.8	11.4	12.7	
7	1	150	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	13.9	8.8	14.4	0.7
8	1	150	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	14.0	8.9	14.2	0.7
	239		-				*	100.0
10		150	108.162.243.35	108.162.243.35	15.1	7.6	13.8	
11		239	172.66.0.227	www.twitter.com	13.8	7.4	12.8	
		239		**Round Trip (ms)**	13.8	7.4	12.8	

0 ms Latency 32 ms

Focus: 11:56:31a - 12:06:31p

www.twitter.com (172.66.0.227) hop 11 10 minutes (11:56:31a - 12:06:31p)



12:06:31 PM

Saturday, August 2, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Respond to problems faster with alerts. Upgrade

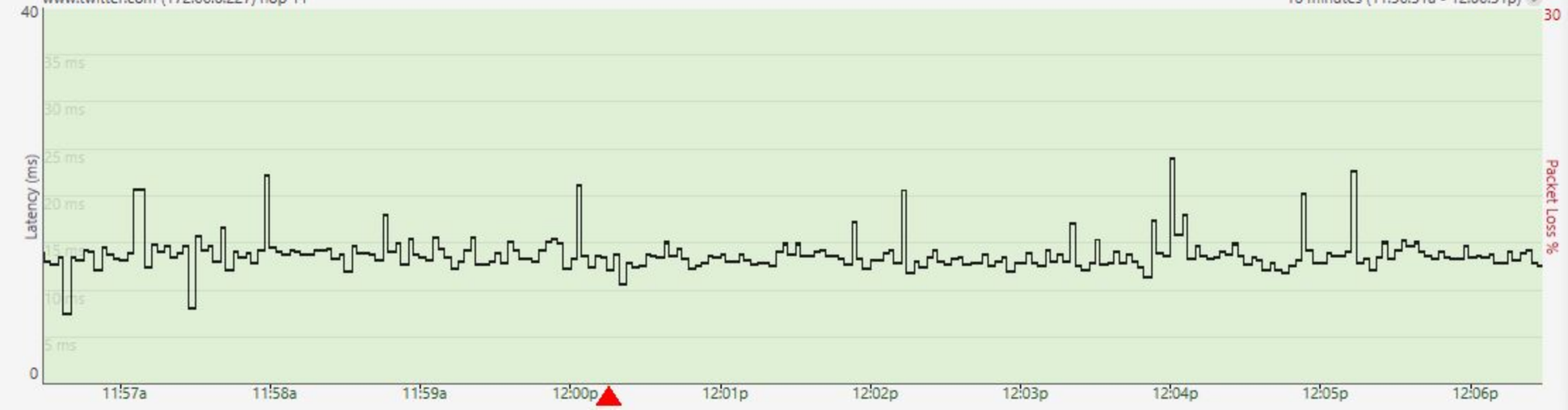
www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.5	0.7	
2		239	96.120.103.145	96.120.103.145	10.0	5.3	10.0	
3		239	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.ne	9.9	5.3	9.6	
4		239	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.1	4.6	9.9	
5		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.2	6.3	10.1	
6		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.8	11.4	12.7	
7	1	150	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	13.9	8.8	14.4	0.7
8	1	150	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	14.0	8.9	14.2	0.7
	239		-				*	100.0
10		150	108.162.243.35	108.162.243.35	15.1	7.6	13.8	
11		239	172.66.0.227	www.twitter.com	13.8	7.4	12.8	
		239		**Round Trip (ms)**	13.8	7.4	12.8	

0 ms Latency 32 ms

Focus: 11:56:31a - 12:06:31p

www.twitter.com (172.66.0.227) hop 11 10 minutes (11:56:31a - 12:06:31p)



12:06:31 PM

Saturday, August 2, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

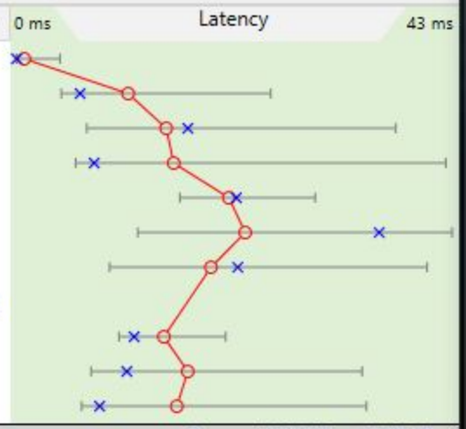
PingPlotter Free

File Edit Tools Help

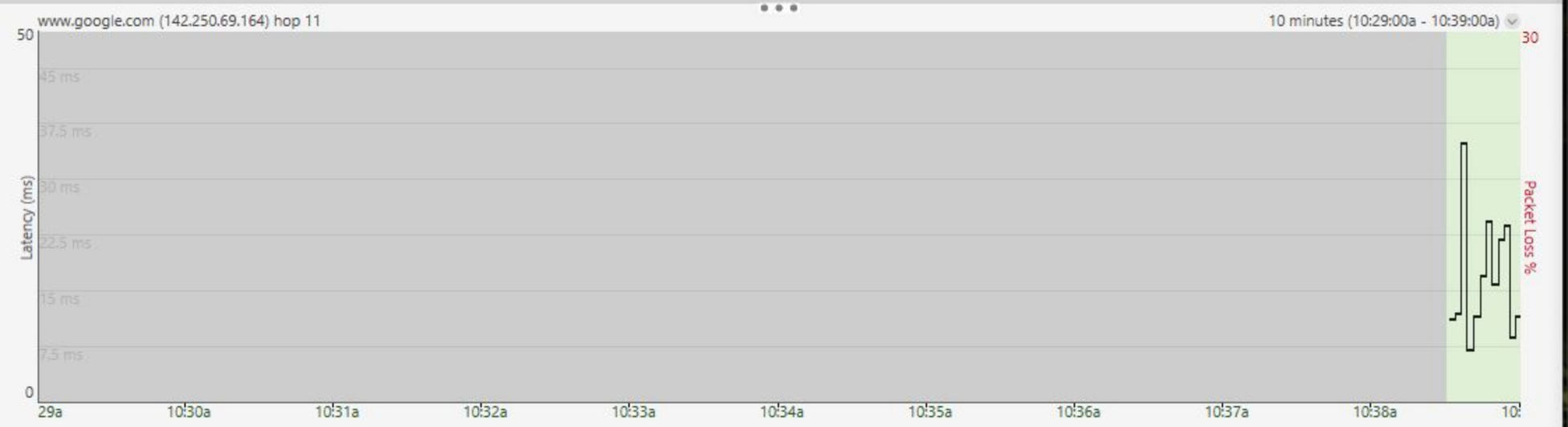
Automatically detect potential network issues with PingPlotter Cloud. Try Now

www.google.com / 142.250.69.164 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		13	192.168.0.1	Archer_AX55	1.3	0.6	0.6	
2		13	96.120.103.145	96.120.103.145	11.5	5.0	6.8	
3		13	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	15.3	7.5	17.4	
4		13	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	16.0	6.4	8.2	
5		13	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	21.4	16.6	22.2	
6		13	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	23.0	12.5	36.2	
7		13	96.110.32.226	be-2111-pe11.seattle.wa.ibone.comcast.net	19.7	9.7	22.3	
	13		-				*	100.0
9		13	142.251.70.103	142.251.70.103	15.0	10.6	12.1	
10		13	209.85.243.97	209.85.243.97	17.4	7.9	11.4	
11		13	142.250.69.164	www.google.com	16.3	7.0	8.7	
		13		**Round Trip (ms)**	16.3	7.0	8.7	



Focus: 10:38:30a - 10:39:00a



10:39:02 AM

Sunday, August 3, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

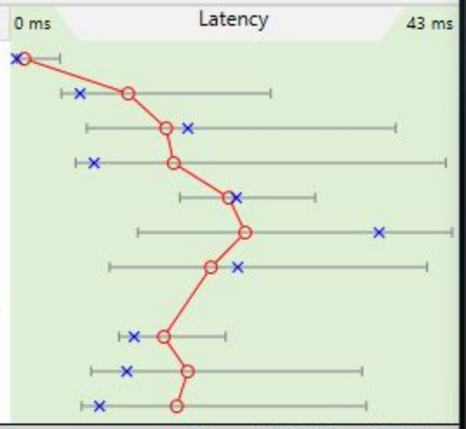
PingPlotter Free

File Edit Tools Help

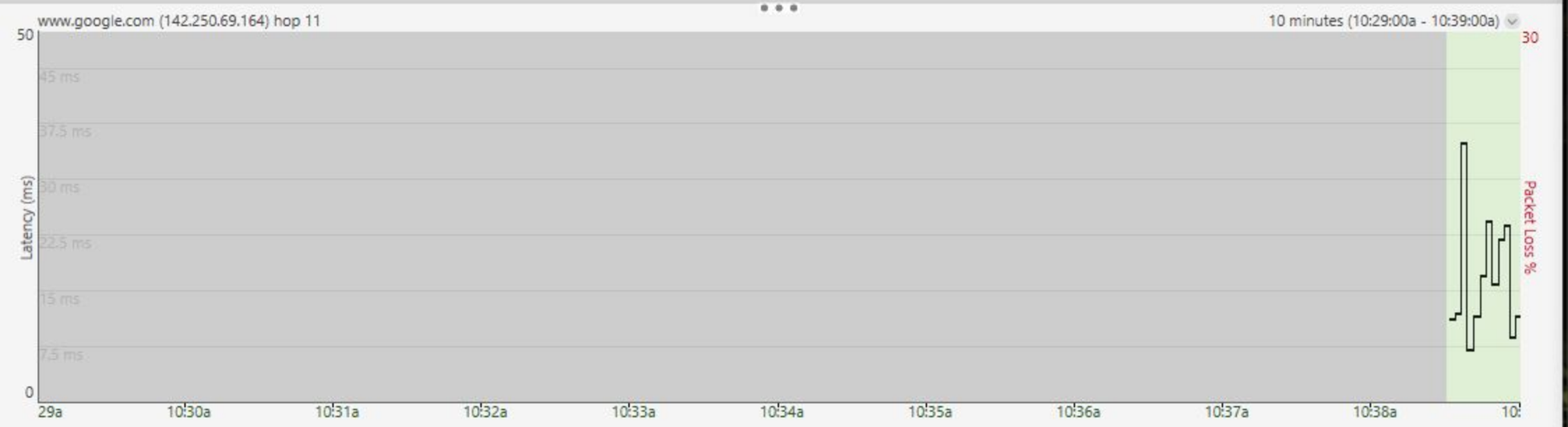
Automatically detect potential network issues with PingPlotter Cloud. Try Now

www.google.com / 142.250.69.164 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		13	192.168.0.1	Archer_AX55	1.3	0.6	0.6	
2		13	96.120.103.145	96.120.103.145	11.5	5.0	6.8	
3		13	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	15.3	7.5	17.4	
4		13	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	16.0	6.4	8.2	
5		13	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	21.4	16.6	22.2	
6		13	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	23.0	12.5	36.2	
7		13	96.110.32.226	be-2111-pe11.seattle.wa.ibone.comcast.net	19.7	9.7	22.3	
	13		-				*	100.0
9		13	142.251.70.103	142.251.70.103	15.0	10.6	12.1	
10		13	209.85.243.97	209.85.243.97	17.4	7.9	11.4	
11		13	142.250.69.164	www.google.com	16.3	7.0	8.7	
		13		**Round Trip (ms)**	16.3	7.0	8.7	



Focus: 10:38:30a - 10:39:00a



10:39:02 AM

Sunday, August 3, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

Command Prompt

```
Wireless LAN adapter Local Area Connection* 9:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 10:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Ethernet adapter Bluetooth Network Connection:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

C:\Users\Marshall>ping 192.168.0.78 -n 20

Pinging 192.168.0.78 with 32 bytes of data:
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.78:
    Packets: Sent = 20, Received = 20, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\Marshall>_
```

PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud to share live, read-only data with your customers. Try N

www.twitter.com Interval 2.5 seconds Focus Auto 100ms 200

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency
1	16	239	192.168.0.1	Archer_AX55	0.7	0.5	*	6.7	
2	21	239	96.120.103.145	96.120.103.145	10.4	7.8	*	8.8	
3	21	239	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	9.9	7.1	*	8.8	
4	21	239	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.3	8.2	*	8.8	
5	21	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.3	4.3	*	8.8	
6	21	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.9	11.4	*	8.8	
7	18	136	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	13.9	11.2	*	13.2	
8	18	136	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	14.0	7.7	*	13.2	
	239		-				*	100.0	
10	18	136	108.162.243.35	108.162.243.35	16.5	12.3	*	13.2	
11	21	239	172.66.0.227	www.twitter.com	13.9	11.8	*	8.8	
	21	239		Round Trip (ms)	13.9	11.8	*	8.8	Focus: 10:54:57p - 11

11:06:19 PM

Sunday, August 3, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

Command Prompt

```
Wireless LAN adapter Local Area Connection* 9:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 10:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Ethernet adapter Bluetooth Network Connection:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

C:\Users\Marshall>ping 192.168.0.78 -n 20

Pinging 192.168.0.78 with 32 bytes of data:
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.78:
    Packets: Sent = 20, Received = 20, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\Marshall>_
```

PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud to share live, read-only data with your customers. Try N

www.twitter.com Interval 2.5 seconds Focus Auto 100ms 200

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency
1	16	239	192.168.0.1	Archer_AX55	0.7	0.5	*	6.7	
2	21	239	96.120.103.145	96.120.103.145	10.4	7.8	*	8.8	
3	21	239	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	9.9	7.1	*	8.8	
4	21	239	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.3	8.2	*	8.8	
5	21	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.3	4.3	*	8.8	
6	21	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.9	11.4	*	8.8	
7	18	136	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	13.9	11.2	*	13.2	
8	18	136	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	14.0	7.7	*	13.2	
	239		-				*	100.0	
10	18	136	108.162.243.35	108.162.243.35	16.5	12.3	*	13.2	
11	21	239	172.66.0.227	www.twitter.com	13.9	11.8	*	8.8	
	21	239		Round Trip (ms)	13.9	11.8	*	8.8	Focus: 10:54:57p - 11

11:06:19 PM
Sunday, August 3, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

Command Prompt

```
C:\Users\Marshall>ping 192.168.0.78 -n 10

Pinging 192.168.0.78 with 32 bytes of data:
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.78:
    Packets: Sent = 10, Received = 10, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\Marshall>
```

PingPlotter Free

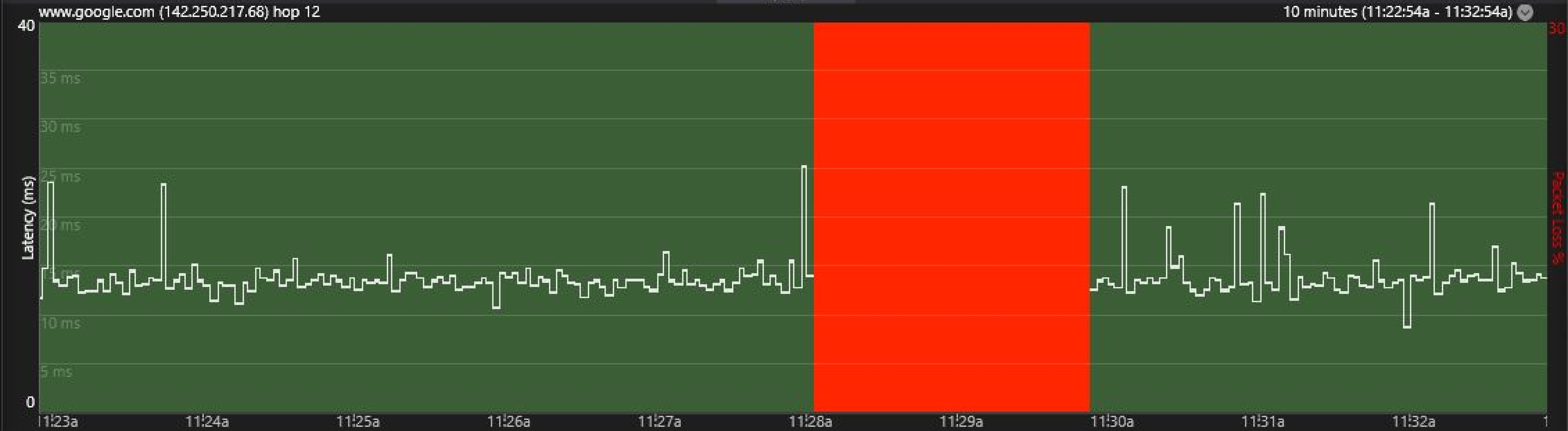
File Edit Tools Help

Need some friendly advice to fix a problem? Try Now

www.google.com / 142.250.217.68 — Interval 2.5 seconds — Focus Auto — 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1	19	239	192.168.0.1	Archer_AX55	0.7	0.4	0.7	7.9
2	43	239	96.120.103.145	96.120.103.145	10.3	3.5	10.1	18.0
3	43	239	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	10.2	7.0	10.5	18.0
4	43	239	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.1	7.8	10.8	18.0
5	43	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.3	5.4	11.9	18.0
6	44	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	14.5	11.5	13.2	18.4
7	70	239	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	13.7	11.8	13.7	29.3
8	46	239	96.110.32.226	be-2111-pe11.seattle.wa.ibone.comcast.net	13.9	7.8	14.4	19.2
	239	239	142.251.70.103	142.251.70.103			*	100.0
10	43	239	142.251.229.135	142.251.229.135	14.5	11.4	13.5	18.0
11	43	239	142.251.55.197	142.251.55.197	13.6	8.1	12.2	18.0
12	44	239	142.250.217.68	www.google.com	13.8	8.7	14.1	18.4
	44	239		Round Trip (ms)	13.8	8.7	14.1	18.4

Focus: 11:22:54a - 11:32:54a



11:32:56 AM

Sunday, August 3, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

PingPlotter alerts will notify you instantly of any issues. Upgrade

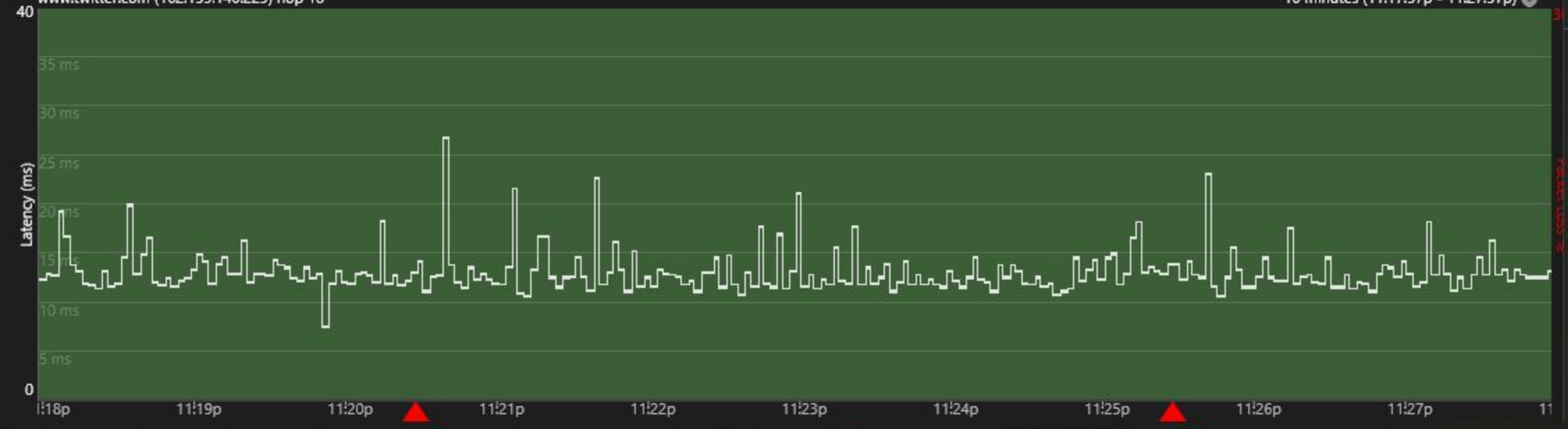
www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.8	0.4	0.5	
2		239	96.120.103.145	96.120.103.145	9.5	6.1	8.5	
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.5	5.3	8.3	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.4	3.5	8.9	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	12.8	7.3	11.9	
6	35	120	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.1	10.7	12.0	29.2
7		120	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	12.8	8.4	13.0	
	239		-				*	100.0
9		120	108.162.243.51	108.162.243.51	14.9	10.1	13.2	
10		239	162.159.140.229	www.twitter.com	13.1	7.5	12.4	
		239		**Round Trip (ms)**	13.1	7.5	12.4	

Latency 0 ms 51 ms

Focus: 11:17:57p - 11:27:57p

www.twitter.com (162.159.140.229) hop 10 10 minutes (11:17:57p - 11:27:57p)



11:28:00 PM

Monday, August 4, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud if you need assisted troubleshooting tools. Try Now

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1	5	239	192.168.0.1	Archer_AX55	0.8	0.5	*	2.1
2	18	239	96.120.103.145	96.120.103.145	9.4	6.5	*	7.5
3	18	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.5	7.1	*	7.5
4	18	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.5	7.0	*	7.5
5	18	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.3	10.5	*	7.5
6	78	239	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	12.9	10.7	*	32.6
7	19	239	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	13.2	10.5	*	7.9
	239		-				*	100.0
9	19	239	108.162.243.51	108.162.243.51	15.8	7.9	*	7.9
10	17	239	162.159.140.229	www.twitter.com	13.1	10.6	*	7.1
	17	239		**Round Trip (ms)**	13.1	10.6	*	7.1

0 ms Latency 78 m

Focus: 11:38:05p - 11:48:05p

www.twitter.com (162.159.140.229) hop 10 10 minutes (11:38:05p - 11:48:05p)

Latency (ms)

40 35 ms 30 ms 25 ms 20 ms 15 ms 10 ms 5 ms 0

11:39p 11:40p 11:41p 11:42p 11:43p 11:44p 11:45p 11:46p 11:47p

11:48:10 PM

Monday, August 4, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud to share live, read-only data with your customers. Try Now

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.8	0.3	0.9	
2	1	239	96.120.103.145	96.120.103.145	9.2	4.5	8.8	0.4
3	1	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.5	5.7	7.9	0.4
4	1	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.4	6.4	8.3	0.4
5	1	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.0	10.1	10.5	0.4
6	31	111	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.1	10.8	12.1	27.9
7	1	112	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	13.2	10.7	12.0	0.9
	239		-				*	100.0
9	1	112	108.162.243.51	108.162.243.51	16.8	11.0	21.5	0.9
10	1	239	162.159.140.229	www.twitter.com	13.0	9.5	12.3	0.4
	1	239		**Round Trip (ms)**	13.0	9.5	12.3	0.4

0 ms Latency 157 m

Focus: 1:35:10a - 1:45:10a

www.twitter.com (162.159.140.229) hop 10 10 minutes (1:35:10a - 1:45:10a)

1:45:12 AM

Tuesday, August 5, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud to share live, read-only data with your customers. Try Now

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.8	0.3	0.9	
2	1	239	96.120.103.145	96.120.103.145	9.2	4.5	8.8	0.4
3	1	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.5	5.7	7.9	0.4
4	1	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.4	6.4	8.3	0.4
5	1	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.0	10.1	10.5	0.4
6	31	111	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.1	10.8	12.1	27.9
7	1	112	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	13.2	10.7	12.0	0.9
	239		-				*	100.0
9	1	112	108.162.243.51	108.162.243.51	16.8	11.0	21.5	0.9
10	1	239	162.159.140.229	www.twitter.com	13.0	9.5	12.3	0.4
	1	239		**Round Trip (ms)**	13.0	9.5	12.3	0.4

0 ms Latency 157 m

Focus: 1:35:10a - 1:45:10a

www.twitter.com (162.159.140.229) hop 10 10 minutes (1:35:10a - 1:45:10a)

1:45:12 AM

Tuesday, August 5, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

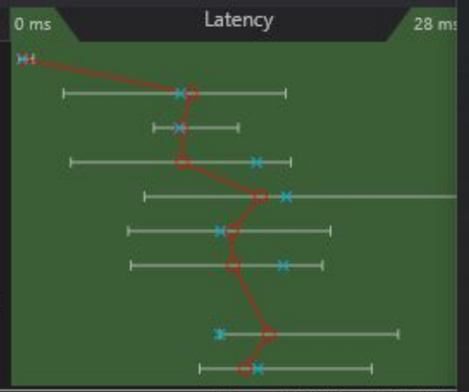
PingPlotter Free

File Edit Tools Help

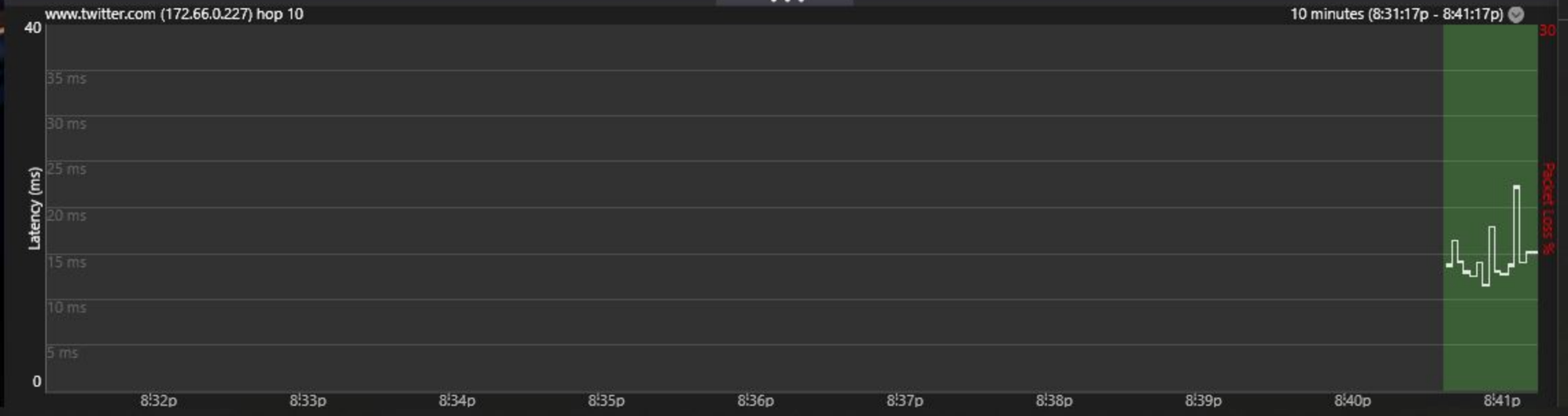
Try PingPlotter Cloud for remote network monitoring. Try Now

www.twitter.com / 172.66.0.227 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		14	192.168.0.1	Archer_AX55	0.8	0.5	0.7	
2		15	96.120.103.145	96.120.103.145	11.1	3.2	10.5	
3		15	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	10.5	8.8	10.4	
4		15	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.5	3.7	15.1	
5		15	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.4	8.2	17.0	
6		15	68.86.93.9	be-36131-cs03.seattle.wa.ibone.comcast.net	13.6	7.2	12.9	
7		15	96.110.44.90	be-2313-pe13.seattle.wa.ibone.comcast.net	13.7	7.4	16.8	
	15		-				*	100.0
9		15	108.162.243.35	108.162.243.35	15.9	12.9	12.9	
10		15	172.66.0.227	www.twitter.com	14.4	11.6	15.2	
		15		**Round Trip (ms)**	14.4	11.6	15.2	



Focus: 8:40:40p - 8:41:17p



8:41:19 PM

Tuesday, August 5, 2025

August 2025

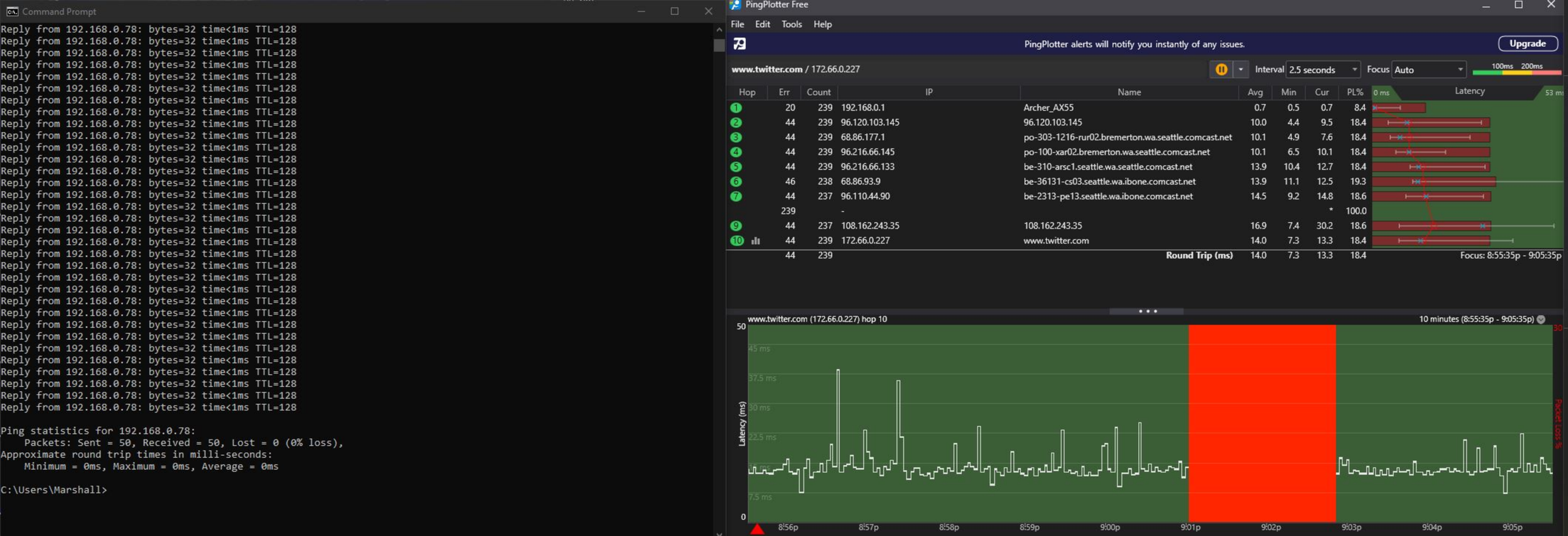
Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

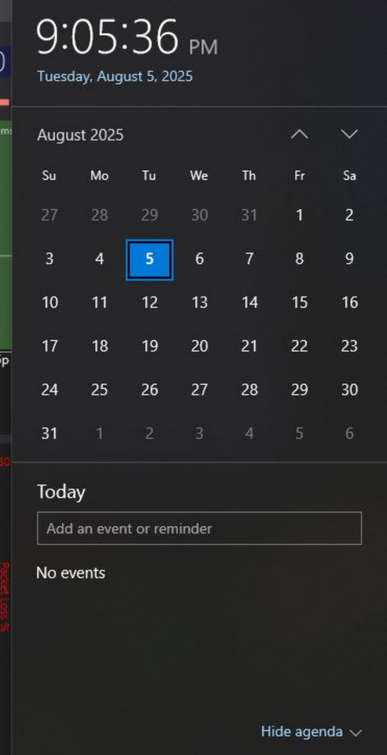
Add an event or reminder

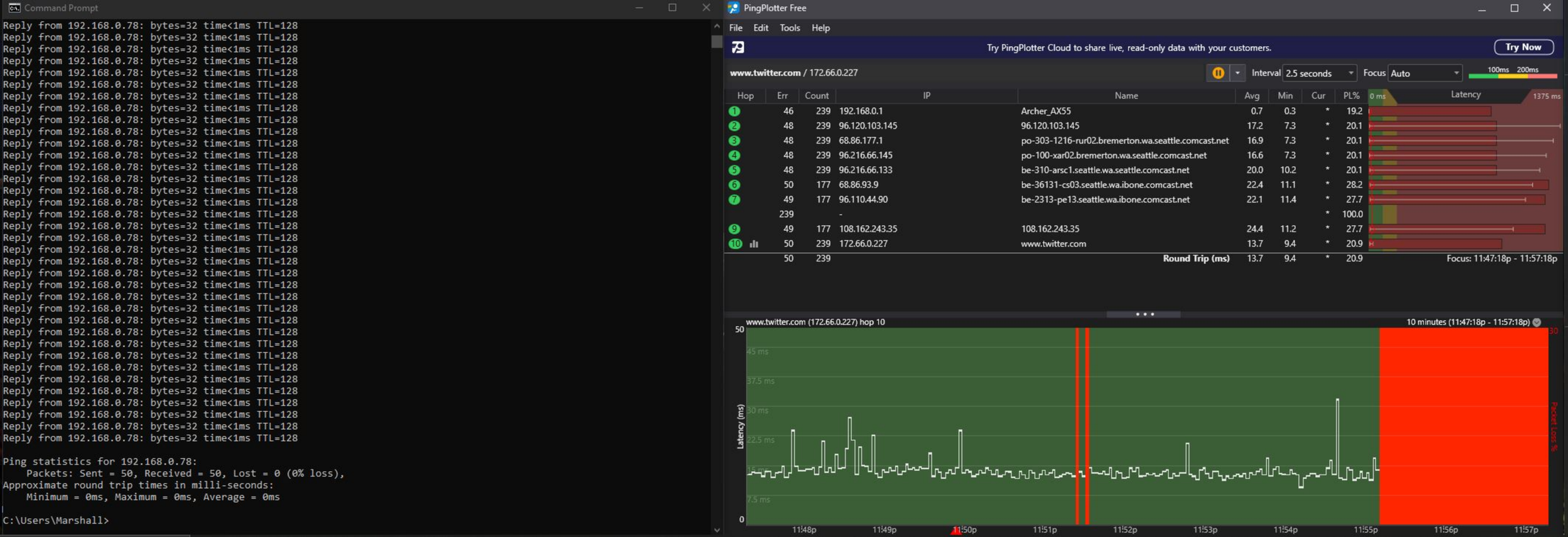
No events

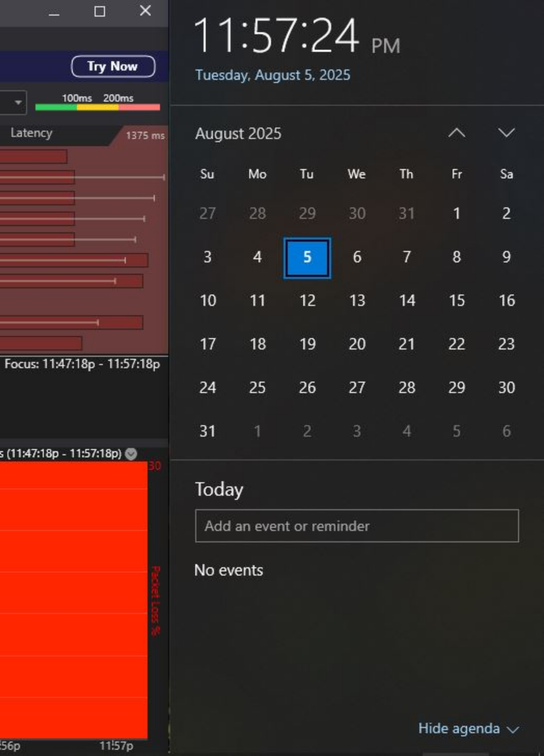
Hide agenda


Command Prompt
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.0.78:
Packets: Sent = 50, Received = 50, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Users\Marshall>

PingPlotter Free
File Edit Tools Help
PingPlotter alerts will notify you instantly of any issues.
Upgrade
www.twitter.com / 172.66.0.227
Interval 2.5 seconds
Focus Auto
Hop Err Count IP Name Avg Min Cur PL% Latency
1 20 239 192.168.0.1 Archer_AX55 0.7 0.5 0.7 8.4
2 44 239 96.120.103.145 96.120.103.145 10.0 4.4 9.5 18.4
3 44 239 68.86.177.1 po-303-1216-rur02.bremerton.wa.seattle.comcast.net 10.1 4.9 7.6 18.4
4 44 239 96.216.66.145 po-100-xar02.bremerton.wa.seattle.comcast.net 10.1 6.5 10.1 18.4
5 44 239 96.216.66.133 be-310-arsc1.seattle.wa.seattle.comcast.net 13.9 10.4 12.7 18.4
6 46 238 68.86.93.9 be-36131-cs03.seattle.wa.ibone.comcast.net 13.9 11.1 12.5 19.3
7 44 237 96.110.44.90 be-2313-pe13.seattle.wa.ibone.comcast.net 14.5 9.2 14.8 18.6
239 - * 100.0
9 44 237 108.162.243.35 108.162.243.35 16.9 7.4 30.2 18.6
10 44 239 172.66.0.227 www.twitter.com 14.0 7.3 13.3 18.4
44 239 Round Trip (ms) 14.0 7.3 13.3 18.4
Focus: 8:55:35p - 9:05:35p
www.twitter.com (172.66.0.227) hop 10
10 minutes (8:55:35p - 9:05:35p)
Latency (ms)
8:56p 8:57p 8:58p 8:59p 9:00p 9:01p 9:02p 9:03p 9:04p 9:05p


9:05:36 PM
Tuesday, August 5, 2025
August 2025
Today
Add an event or reminder
No events
Hide agenda


Command Prompt
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.0.78:
Packets: Sent = 50, Received = 50, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Users\Marshall>
PingPlotter Free
File Edit Tools Help
Try PingPlotter Cloud to share live, read-only data with your customers.
Try Now
www.twitter.com / 172.66.0.227
Interval 2.5 seconds
Focus Auto
100ms 200ms
Hop Err Count IP Name Avg Min Cur PL% Latency
1 46 239 192.168.0.1 Archer_AX55 0.7 0.3 * 19.2
2 48 239 96.120.103.145 96.120.103.145 17.2 7.3 * 20.1
3 48 239 68.86.177.1 po-303-1216-rur02.bremerton.wa.seattle.comcast.net 16.9 7.3 * 20.1
4 48 239 96.216.66.145 po-100-xar02.bremerton.wa.seattle.comcast.net 16.6 7.3 * 20.1
5 48 239 96.216.66.133 be-310-arsc1.seattle.wa.seattle.comcast.net 20.0 10.2 * 20.1
6 50 177 68.86.93.9 be-36131-cs03.seattle.wa.ibone.comcast.net 22.4 11.1 * 28.2
7 49 177 96.110.44.90 be-2313-pe13.seattle.wa.ibone.comcast.net 22.1 11.4 * 27.7
239 - * 100.0
9 49 177 108.162.243.35 108.162.243.35 24.4 11.2 * 27.7
10 50 239 172.66.0.227 www.twitter.com 13.7 9.4 * 20.9
50 239 Round Trip (ms) 13.7 9.4 * 20.9
0 ms
1375 ms
Focus: 11:47:18p - 11:57:18p
www.twitter.com (172.66.0.227) hop 10
10 minutes (11:47:18p - 11:57:18p)
Latency (ms)
Packet Loss %
50
45 ms
37.5 ms
30 ms
22.5 ms
7.5 ms
0
11:48p
11:49p
11:50p
11:51p
11:52p
11:53p
11:54p
11:55p
11:56p
11:57p


11:57:24 PM
Tuesday, August 5, 2025
August 2025
Su Mo Tu We Th Fr Sa
27 28 29 30 31 1 2
3 4 5 6 7 8 9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31 1 2 3 4 5 6
Today
Add an event or reminder
No events
Hide agenda

PingPlotter Free

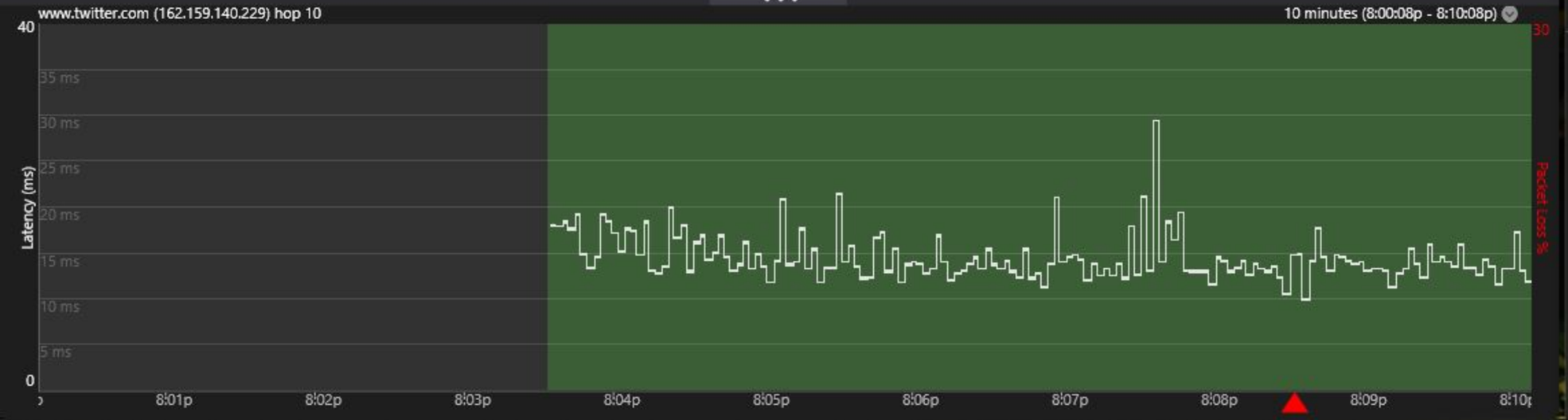
File Edit Tools Help

Monitor two targets at once and compare the results with PingPlotter Standard. Upgrade

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		156	192.168.0.1	Archer_AX55	0.7	0.4	0.6	
2		157	96.120.103.145	96.120.103.145	11.5	7.8	9.5	
3		157	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	11.1	6.6	9.0	
4		157	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.8	6.0	9.5	
5		157	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	17.4	8.5	17.3	
6	16	38	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.6	9.3	*	42.1
7		38	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	14.7	12.4	12.9	
	157		-				*	100.0
9		38	108.162.243.51	108.162.243.51	15.6	9.5	13.6	
10		157	162.159.140.229	www.twitter.com	14.5	9.9	13.1	
		157		**Round Trip (ms)**	14.5	9.9	13.1	

Focus: 8:03:33p - 8:10:08p



8:10:11 PM

Thursday, August 7, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

Command Prompt

```
   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Ethernet adapter Bluetooth Network Connection:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

C:\Users\Marshall>ping 192.168.0.78 -n 20

Pinging 192.168.0.78 with 32 bytes of data:
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.78:
    Packets: Sent = 20, Received = 20, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\Marshall>
```

PingPlotter Free

File Edit Tools Help

Need some friendly advice to fix a problem? Try Now

www.twitter.com | Interval 2.5 seconds | Focus Auto | 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency (0 ms – 106 ms)
1	18	239	192.168.0.1	Archer_AX55	0.7	0.5	0.9	7.5	
2	47	239	96.120.103.145	96.120.103.145	10.6	7.7	*	19.7	
3	47	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	10.5	3.9	*	19.7	
4	47	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.4	5.1	*	19.7	
5	47	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	17.5	11.0	*	19.7	
6	91	189	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.9	8.1	*	48.1	
7	46	189	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	14.5	9.2	*	24.3	
	239		-				*	100.0	
9	46	189	108.162.243.51	108.162.243.51	16.9	8.9	*	24.3	
10	47	239	162.159.140.229	www.twitter.com	14.3	8.6	*	19.7	
	47	239		Round Trip (ms)	14.3	8.6	*	19.7	Focus: 8:46:39p - 8:56:39p

www.twitter.com (162.159.140.229) hop 10 — 10 minutes (8:46:39p - 8:56:39p)

8:57:41 PM

Thursday, August 7, 2025

August 2025

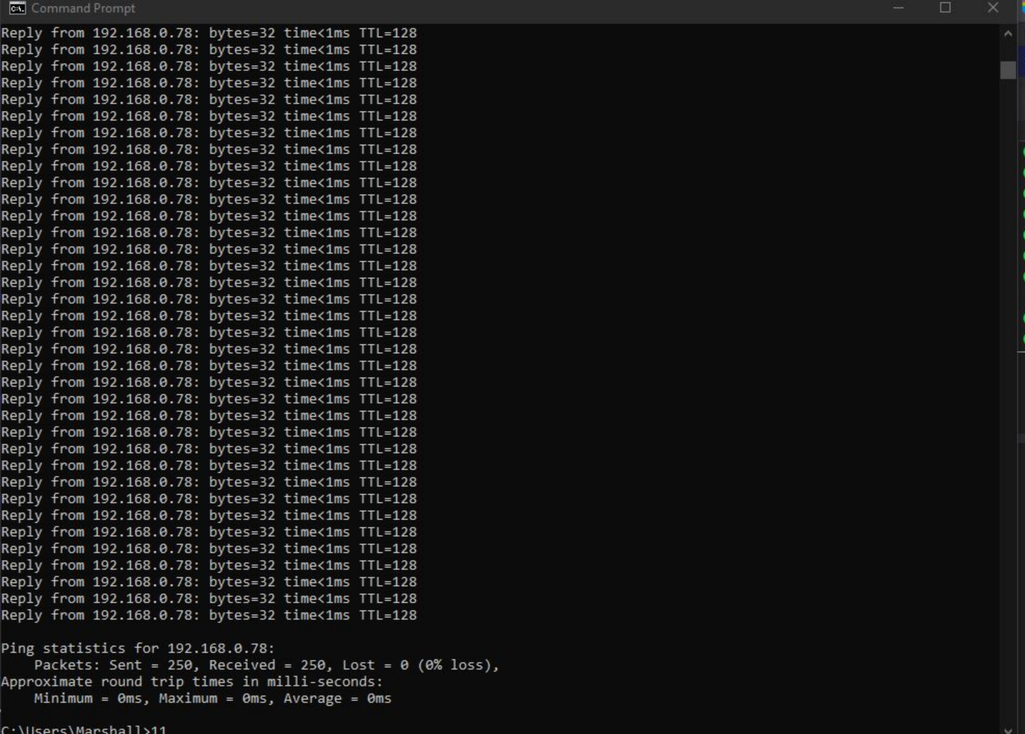
Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

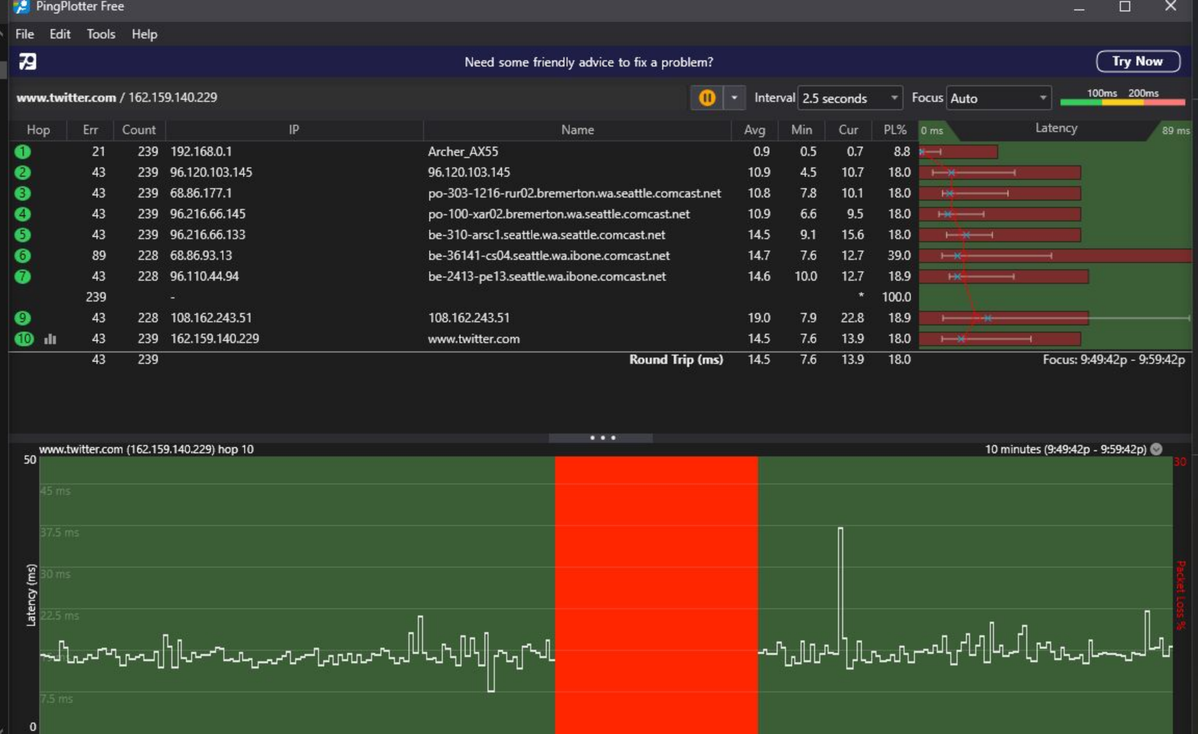
Today

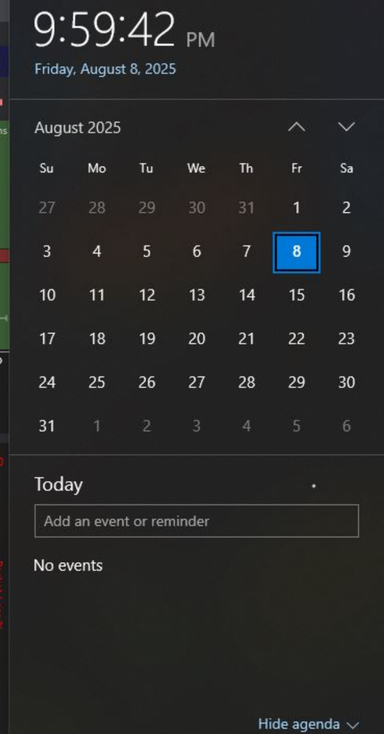
Add an event or reminder

No events

Hide agenda


Command Prompt
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.0.78:
Packets: Sent = 250, Received = 250, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Users\Marshall>11


PingPlotter Free
File Edit Tools Help
Need some friendly advice to fix a problem?
Try Now
www.twitter.com / 162.159.140.229
Interval 2.5 seconds
Focus Auto
100ms 200ms
Hop Err Count IP Name Avg Min Cur PL% Latency
0 ms 89 ms
1 21 239 192.168.0.1 Archer_AX55 0.9 0.5 0.7 8.8
2 43 239 96.120.103.145 96.120.103.145 10.9 4.5 10.7 18.0
3 43 239 68.86.177.1 po-303-1216-rur02.bremerton.wa.seattle.comcast.net 10.8 7.8 10.1 18.0
4 43 239 96.216.66.145 po-100-xar02.bremerton.wa.seattle.comcast.net 10.9 6.6 9.5 18.0
5 43 239 96.216.66.133 be-310-arsc1.seattle.wa.seattle.comcast.net 14.5 9.1 15.6 18.0
6 89 228 68.86.93.13 be-36141-cs04.seattle.wa.ibone.comcast.net 14.7 7.6 12.7 39.0
7 43 228 96.110.44.94 be-2413-pe13.seattle.wa.ibone.comcast.net 14.6 10.0 12.7 18.9
239 - * 100.0
9 43 228 108.162.243.51 108.162.243.51 19.0 7.9 22.8 18.9
10 43 239 162.159.140.229 www.twitter.com 14.5 7.6 13.9 18.0
43 239 Round Trip (ms) 14.5 7.6 13.9 18.0
Focus: 9:49:42p - 9:59:42p
www.twitter.com (162.159.140.229) hop 10
10 minutes (9:49:42p - 9:59:42p)
50
45 ms
37.5 ms
30 ms
22.5 ms
15 ms
7.5 ms
0
Latency (ms)
30
Packet Loss %


9:59:42 PM
Friday, August 8, 2025
August 2025
Su Mo Tu We Th Fr Sa
27 28 29 30 31 1 2
3 4 5 6 7 8 9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31 1 2 3 4 5 6
Today
Add an event or reminder
No events
Hide agenda

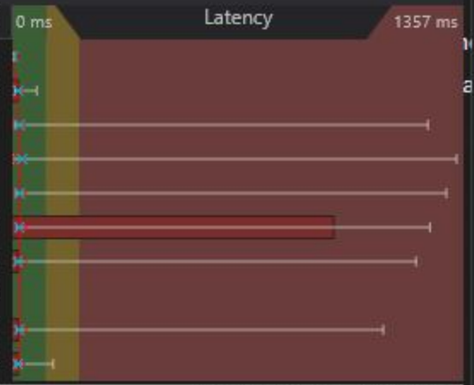
PingPlotter Free

File Edit Tools Help

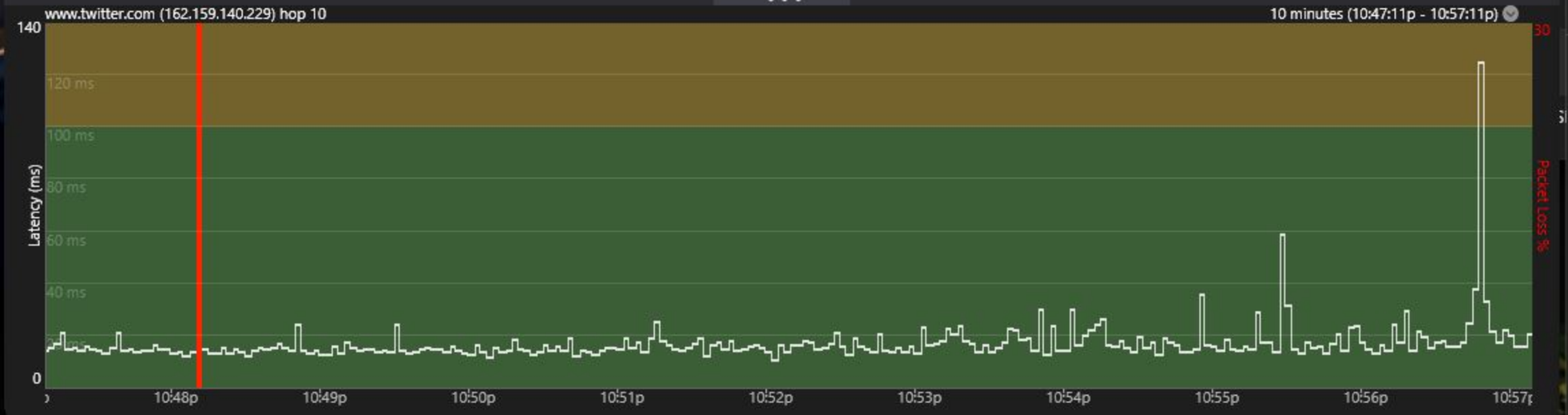
Wondering which PingPlotter is best for you? Compare

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.8	0.3	0.7	
2	1	239	96.120.103.145	96.120.103.145	12.8	7.9	16.7	0.4
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	17.6	5.5	21.8	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	18.5	3.4	29.1	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	22.0	9.3	21.5	
6	52	239	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	23.3	11.4	20.2	21.8
7	1	239	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	23.0	8.5	14.3	0.4
	239		-				*	100.0
9	1	239	108.162.243.51	108.162.243.51	24.6	10.8	19.3	0.4
10	1	239	162.159.140.229	www.twitter.com	16.9	10.1	15.6	0.4
	1	239		**Round Trip (ms)**	16.9	10.1	15.6	0.4



Focus: 10:47:11p - 10:57:11p



10:57:11 PM

Friday, August 8, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

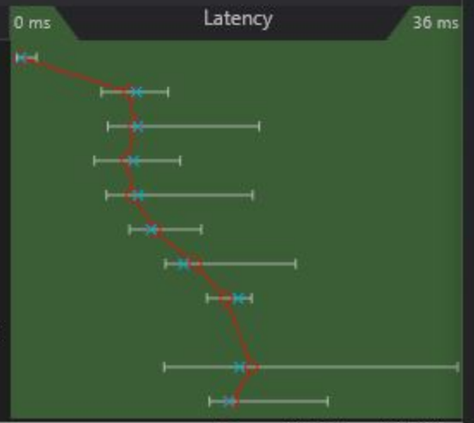
PingPlotter Free

File Edit Tools Help

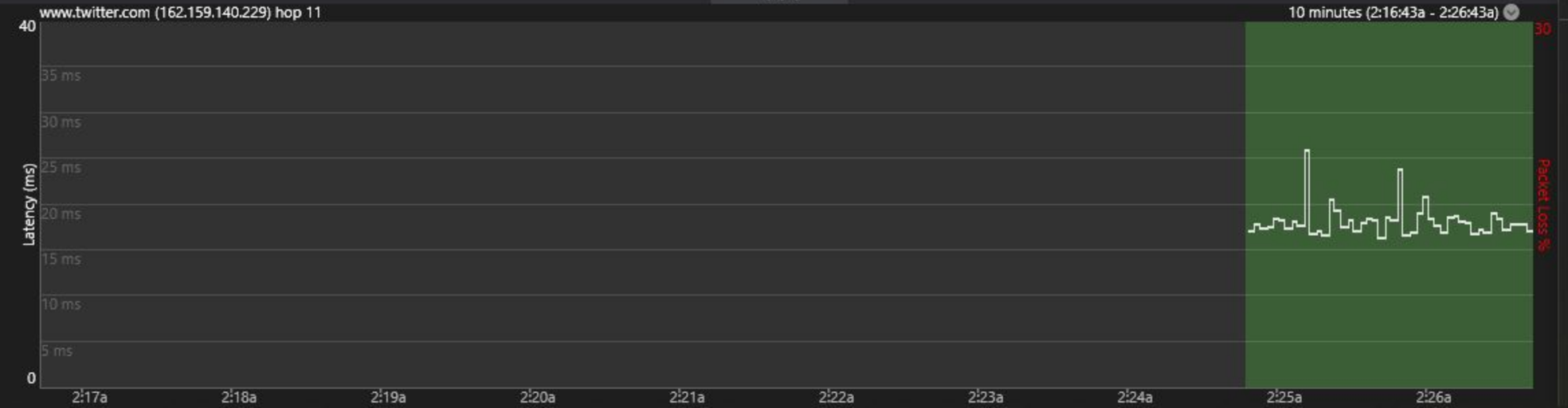
Need some friendly advice to fix a problem? Try Now

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		45	192.168.0.1	Archer_AX55	0.7	0.5	0.8	
2		46	96.120.103.145	96.120.103.145	9.7	7.4	10.3	
3		46	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	10.1	7.9	10.4	
4		46	69.139.163.129	po-2-rur01.bremerton.wa.seattle.comcast.net	9.5	6.8	10.0	
5		46	96.216.66.137	po-100-xar01.bremerton.wa.seattle.comcast.net	9.9	7.8	10.4	
6		46	96.216.66.121	be-310-arsc1.burien.wa.seattle.comcast.net	11.7	9.7	11.4	
7		46	68.86.94.141	be-36141-cs04.portland.or.ibone.comcast.net	15.1	12.6	14.1	
8		46	96.110.44.82	be-2113-pe13.seattle.wa.ibone.comcast.net	17.6	16.0	18.6	
	46		-				*	100.0
10		46	108.162.243.51	108.162.243.51	19.6	12.5	18.7	
11		46	162.159.140.229	www.twitter.com	18.1	16.2	17.8	
		46		**Round Trip (ms)**	18.1	16.2	17.8	



Focus: 2:24:47a - 2:26:43a



2:26:45 AM

Friday, August 8, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

Command Prompt

```
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
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Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
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Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
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Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
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Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.78:
    Packets: Sent = 200, Received = 200, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\Marshall>
```

PingPlotter Free

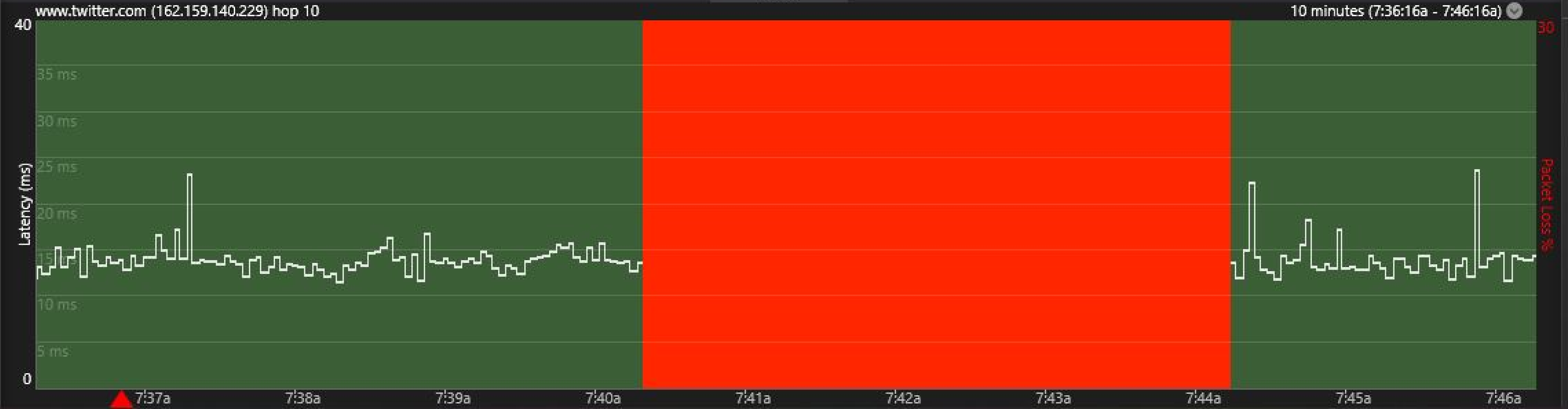
File Edit Tools Help

Try PingPlotter Cloud if you need assisted troubleshooting tools. Try Now

www.twitter.com | Interval 2.5 seconds | Focus Auto | 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency
1	38	239	192.168.0.1	Archer_AX55	0.7	0.4	0.5	15.9	
2	94	239	96.120.103.145	96.120.103.145	10.0	7.3	8.9	39.3	
3	94	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	10.2	6.7	8.0	39.3	
4	94	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.9	4.9	8.0	39.3	
5	94	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.9	9.9	12.4	39.3	
6	120	226	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.7	7.6	*	53.1	
7	94	226	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	14.0	8.1	13.5	41.6	
	239		-				*	100.0	
9	94	226	108.162.243.51	108.162.243.51	16.3	9.9	12.3	41.6	
10	94	239	162.159.140.229	www.twitter.com	13.9	11.5	13.9	39.3	
	94	239		Round Trip (ms)	13.9	11.5	13.9	39.3	Focus: 7:36:16a - 7:46:16a

Latency: 0 ms – 42 ms



7:47:43 AM

Saturday, August 9, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

Command Prompt

```
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
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Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
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Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.78:
    Packets: Sent = 200, Received = 200, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\Marshall>
```

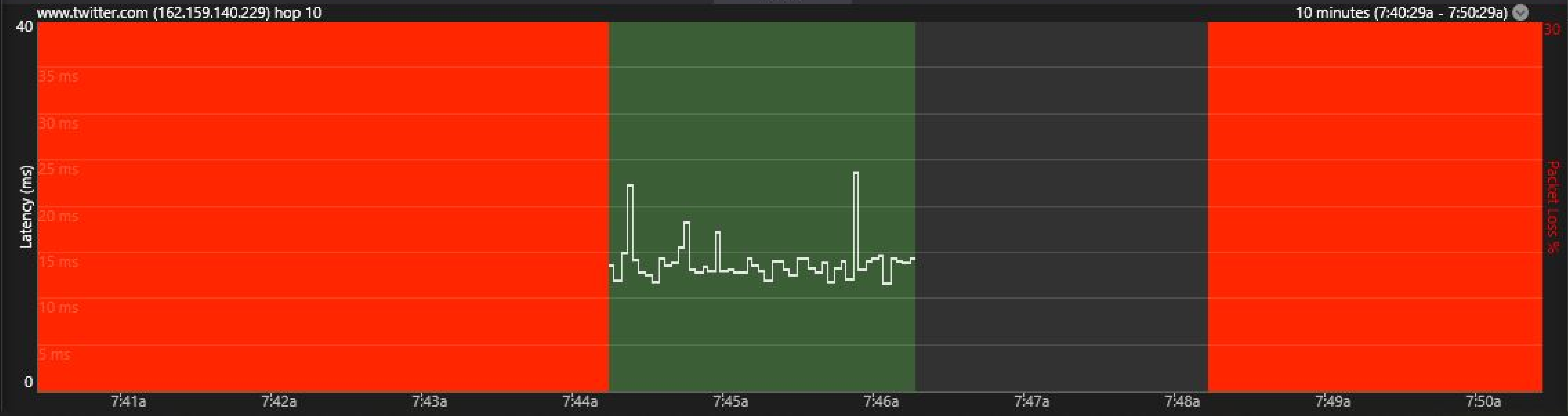
PingPlotter Free

File Edit Tools Help

www.twitter.com / 162.159.140.229

Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency (0 ms – 42 ms)
1	55	193	192.168.0.1	Archer_AX55	0.7	0.4	0.6	28.5	
2	144	193	96.120.103.145	96.120.103.145	10.0	7.6	*	74.6	
3	144	193	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	10.2	7.5	*	74.6	
4	144	193	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.9	4.9	*	74.6	
5	144	193	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.9	9.9	*	74.6	
6	152	193	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.7	7.6	*	78.8	
7	144	193	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	13.7	11.9	*	74.6	
		193	-				*	100.0	
9	144	193	108.162.243.51	108.162.243.51	16.8	9.9	*	74.6	
10	144	193	162.159.140.229	www.twitter.com	14.0	11.6	*	74.6	
	144	193		**Round Trip (ms)**	14.0	11.6	*	74.6	Focus: 7:40:29a - 7:50:29a



7:50:31 AM

Saturday, August 9, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

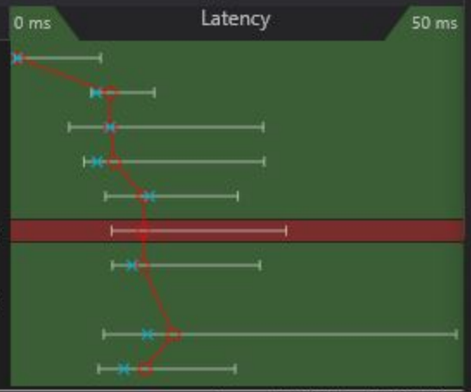
PingPlotter Free

File Edit Tools Help

Respond to problems faster with alerts. Upgrade

www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		126	192.168.0.1	Archer_AX55	0.9	0.5	0.7	
2		127	96.120.103.145	96.120.103.145	11.1	9.0	9.6	
3		127	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	11.1	6.5	11.1	
4		127	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	11.5	8.2	9.6	
5		127	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	14.9	10.6	15.5	
6	47	126	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	14.8	11.3	*	37.3
7		127	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	14.7	11.4	13.6	
	126		-				*	100.0
9		127	108.162.243.51	108.162.243.51	18.2	10.4	15.3	
10		127	162.159.140.229	www.twitter.com	15.0	9.8	12.6	
		127		**Round Trip (ms)**	15.0	9.8	12.6	



Focus: 9:00:05p - 9:05:23p

9:05:24 PM

Monday, August 11, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Minimize remote worker internet downtime with PingPlotter Cloud. Try Now

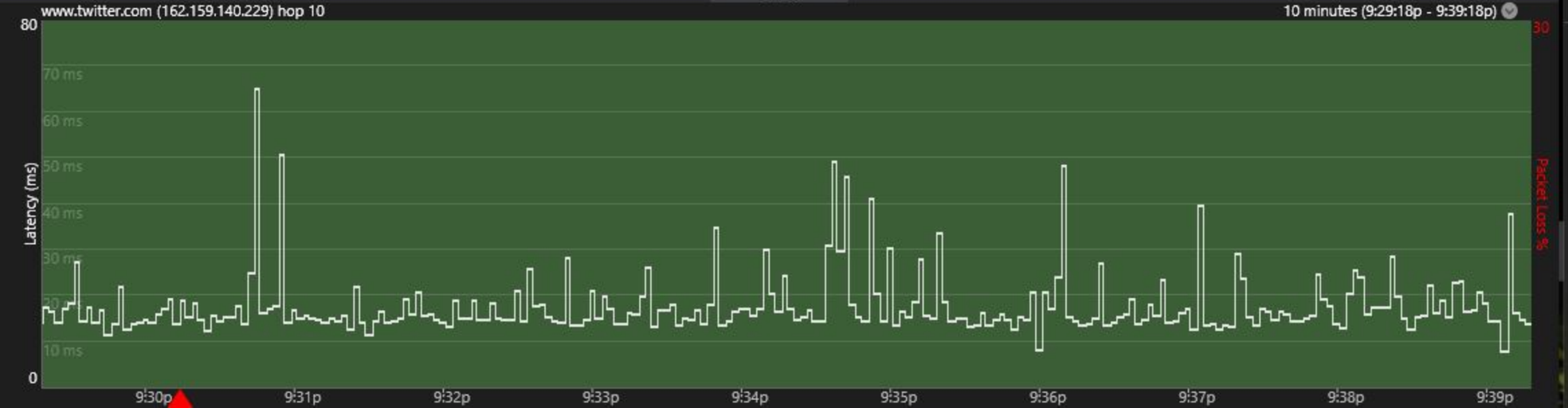
www.twitter.com / 162.159.140.229 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.8	0.3	0.5	
2		239	96.120.103.145	96.120.103.145	13.3	7.9	17.1	
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	13.3	4.4	18.5	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	14.5	7.3	20.0	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	19.7	8.1	127.3	
6	61	217	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	19.5	11.6	27.7	28.1
7		217	96.110.44.94	be-2413-pe13.seattle.wa.ibone.comcast.net	17.9	11.9	16.8	
	239		-				*	100.0
9		217	108.162.243.51	108.162.243.51	20.0	9.3	27.5	
10		239	162.159.140.229	www.twitter.com	17.7	7.6	14.4	
		239		**Round Trip (ms)**	17.7	7.6	14.4	

0 ms Latency 182 ms

Focus: 9:29:18p - 9:39:18p

www.twitter.com (162.159.140.229) hop 10 10 minutes (9:29:18p - 9:39:18p)



9:39:19 PM

Tuesday, August 12, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Automatically detect potential network issues with PingPlotter Cloud. Try Now

www.google.com / 172.217.215.104 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.8	
2		239	96.120.103.145	96.120.103.145	10.3	8.3	10.4	
3		8	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	10.0	8.3	11.5	
4		239	96.216.66.137	po-100-xar01.bremerton.wa.seattle.comcast.net	10.1	7.2	10.7	
5		239	96.216.66.121	be-310-arsc1.burien.wa.seattle.comcast.net	12.4	9.3	11.7	
6		239	68.86.94.129	be-36111-cs01.portland.or.ibone.comcast.net	15.1	12.4	14.1	
7	4	119	96.110.32.230	be-2211-pe11.seattle.wa.ibone.comcast.net	17.8	15.9	17.9	3.4
8	9	127	96.110.32.234	be-2311-pe11.seattle.wa.ibone.comcast.net	18.2	15.6	*	7.1
9		119	142.251.229.139	142.251.229.139	17.7	15.5	16.6	
10		7	192.178.105.46	192.178.105.46	17.8	17.1	18.0	
11		7	216.239.46.202	216.239.46.202	24.7	22.8	25.4	
12		7	192.178.74.208	192.178.74.208	58.7	57.0	58.2	
13		7	192.178.73.81	192.178.73.81	80.1	79.0	79.0	

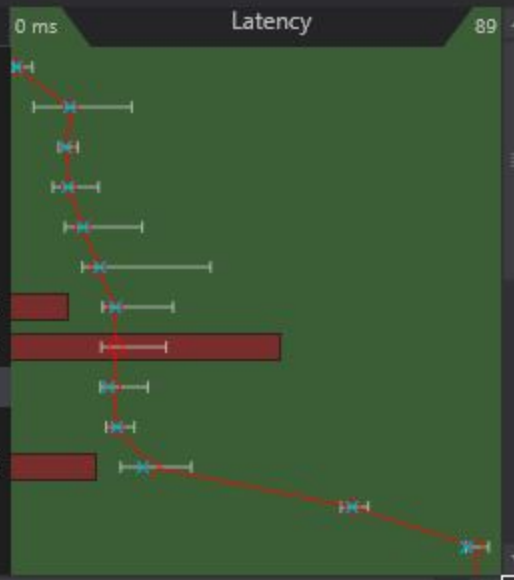
PingPlotter Free

File Edit Tools Help

Automatically detect potential network issues with PingPlotter Cloud. Try Now

www.google.com / 172.217.215.104 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.9	
2		239	96.120.103.145	96.120.103.145	10.3	3.9	10.1	
3		20	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	9.8	8.3	9.4	
4		239	96.216.66.137	po-100-xar01.bremerton.wa.seattle.comcast.net	10.0	7.2	9.8	
5		239	96.216.66.121	be-310-arsc1.burien.wa.seattle.comcast.net	12.4	9.3	12.5	
6		239	68.86.94.129	be-36111-cs01.portland.or.ibone.comcast.net	15.1	12.4	15.4	
7	4	119	96.110.32.230	be-2211-pe11.seattle.wa.ibone.comcast.net	17.9	15.8	18.0	3.4
8	22	140	96.110.32.234	be-2311-pe11.seattle.wa.ibone.comcast.net	18.2	15.6	*	15.7
9		119	142.251.229.139	142.251.229.139	17.7	15.5	16.8	
10		20	192.178.105.46	192.178.105.46	18.1	16.4	18.3	
11	1	20	216.239.46.202	216.239.46.202	24.4	18.9	22.8	5.0
12		20	192.178.74.208	192.178.74.208	59.0	57.0	58.9	
13		20	192.178.73.81	192.178.73.81	80.4	78.6	78.7	



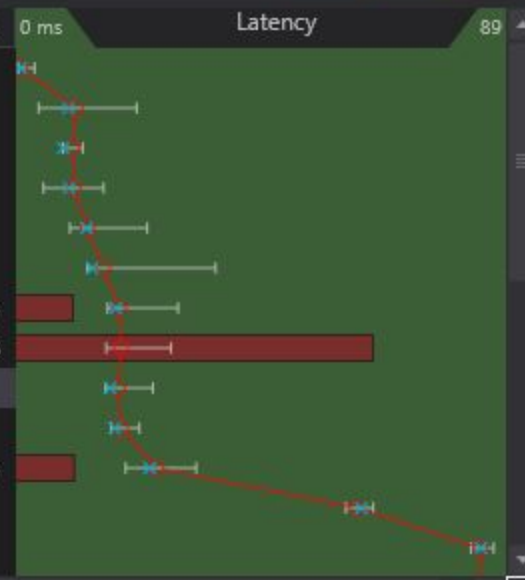
PingPlotter Free

File Edit Tools Help

Automatically detect potential network issues with PingPlotter Cloud. Try Now

www.google.com / 172.217.215.104 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.8	
2		239	96.120.103.145	96.120.103.145	10.3	3.9	9.0	
3		29	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	9.7	8.1	8.1	
4		239	96.216.66.137	po-100-xar01.bremerton.wa.seattle.comcast.net	10.0	4.7	9.2	
5		239	96.216.66.121	be-310-arsc1.burien.wa.seattle.comcast.net	12.4	9.3	12.2	
6		239	68.86.94.129	be-36111-cs01.portland.or.ibone.comcast.net	15.0	12.4	13.2	
7	4	119	96.110.32.230	be-2211-pe11.seattle.wa.ibone.comcast.net	17.9	15.8	17.2	3.4
8	31	149	96.110.32.234	be-2311-pe11.seattle.wa.ibone.comcast.net	18.2	15.6	*	20.8
9		119	142.251.229.139	142.251.229.139	17.6	15.5	16.2	
10		29	192.178.105.46	192.178.105.46	18.1	16.4	17.0	
11	1	29	216.239.46.202	216.239.46.202	24.3	18.9	23.1	3.4
12		29	192.178.74.208	192.178.74.208	58.9	57.0	59.7	
13		29	192.178.73.81	192.178.73.81	80.2	78.6	80.4	



www.google.com (172.217.215.104) hop 26 10 minutes (12:32:02a - 12:42:02a)

PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud to share live, read-only data with your customers. Try Now

www.google.com / 172.217.215.104 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.7	
2		239	96.120.103.145	96.120.103.145	10.3	3.9	8.6	
3		42	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	9.7	8.1	9.4	
4		239	96.216.66.137	po-100-xar01.bremerton.wa.seattle.comcast.net	10.0	4.7	9.1	
5		239	96.216.66.121	be-310-arsc1.burien.wa.seattle.comcast.net	12.3	6.8	11.3	
6		239	68.86.94.129	be-36111-cs01.portland.or.ibone.comcast.net	15.0	12.4	13.7	
7	4	119	96.110.32.230	be-2211-pe11.seattle.wa.ibone.comcast.net	17.9	15.8	18.6	3.4
8	43	161	96.110.32.234	be-2311-pe11.seattle.wa.ibone.comcast.net	18.2	15.6	*	26.7
9		119	142.251.229.139	142.251.229.139	17.5	15.5	17.8	
10		41	192.178.105.46	192.178.105.46	18.2	16.4	18.3	
11		6	216.239.57.194	216.239.57.194	25.2	24.3	25.1	
12		6	192.178.74.210	192.178.74.210	58.7	57.9	58.5	
13		6	192.178.73.72	192.178.73.72	80.7	79.7	80.3	

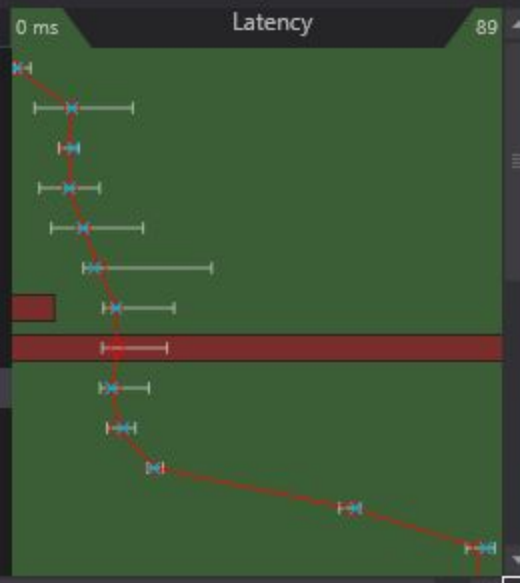
PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud if you need assisted troubleshooting tools. Try Now

www.google.com / 172.217.215.104 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.7	
2		239	96.120.103.145	96.120.103.145	10.3	3.9	10.3	
3		52	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	9.8	8.1	10.7	
4		239	96.216.66.137	po-100-xar01.bremerton.wa.seattle.comcast.net	10.0	4.7	9.9	
5		239	96.216.66.121	be-310-arsc1.burien.wa.seattle.comcast.net	12.3	6.8	12.3	
6		239	68.86.94.129	be-36111-cs01.portland.or.ibone.comcast.net	15.0	12.4	14.2	
7	3	119	96.110.32.230	be-2211-pe11.seattle.wa.ibone.comcast.net	17.8	15.8	18.0	2.5
8	54	172	96.110.32.234	be-2311-pe11.seattle.wa.ibone.comcast.net	18.2	15.6	*	31.4
9		119	142.251.229.139	142.251.229.139	17.5	15.2	17.1	
10		52	192.178.105.46	192.178.105.46	18.3	16.4	19.2	
11		17	216.239.57.194	216.239.57.194	24.6	23.4	24.5	
12		17	192.178.74.210	192.178.74.210	58.7	56.6	59.5	
13		17	192.178.73.72	192.178.73.72	80.9	78.5	81.9	



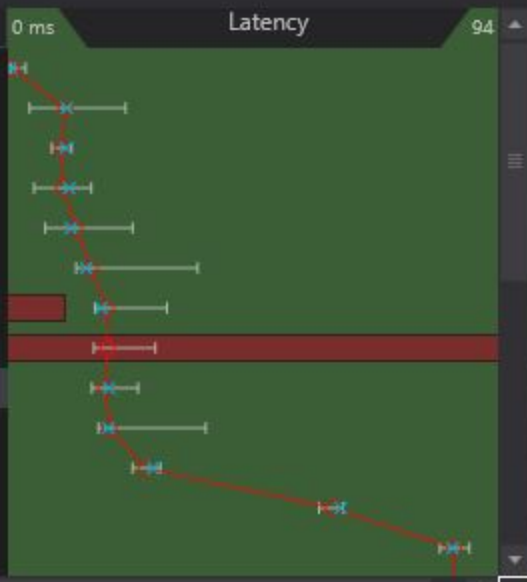
PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud to share live, read-only data with your customers. Try Now

www.google.com / 172.217.215.104 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.5	
2		239	96.120.103.145	96.120.103.145	10.4	3.9	10.7	
3		69	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	9.8	8.0	10.6	
4		239	96.216.66.137	po-100-xar01.bremerton.wa.seattle.comcast.net	10.0	4.7	11.1	
5		239	96.216.66.121	be-310-arsc1.burien.wa.seattle.comcast.net	12.3	6.8	11.4	
6		239	68.86.94.129	be-36111-cs01.portland.or.ibone.comcast.net	15.1	12.4	14.2	
7	4	119	96.110.32.230	be-2211-pe11.seattle.wa.ibone.comcast.net	18.0	15.8	17.0	3.4
8	71	189	96.110.32.234	be-2311-pe11.seattle.wa.ibone.comcast.net	18.2	15.6	*	37.6
9		119	142.251.229.139	142.251.229.139	17.7	15.2	18.4	
10		69	192.178.105.46	192.178.105.46	18.5	16.4	18.2	
11		34	216.239.57.194	216.239.57.194	25.0	22.7	26.4	
12		34	192.178.74.210	192.178.74.210	59.0	56.6	60.5	
13		34	192.178.73.72	192.178.73.72	81.1	78.5	80.8	



PingPlotter Free

File Edit Tools Help

Wondering which PingPlotter is best for you? Compare

www.google.com / 172.217.215.104 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.8	
2		239	96.120.103.145	96.120.103.145	10.4	3.9	10.7	
3		79	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	9.9	8.0	10.5	
4		239	96.216.66.137	po-100-xar01.bremerton.wa.seattle.comcast.net	10.1	4.7	8.9	
5		239	96.216.66.121	be-310-arsc1.burien.wa.seattle.comcast.net	12.2	6.8	13.1	
6		239	68.86.94.129	be-36111-cs01.portland.or.ibone.comcast.net	15.1	12.5	15.8	
7	4	119	96.110.32.230	be-2211-pe11.seattle.wa.ibone.comcast.net	18.0	15.8	17.8	3.4
8	81	199	96.110.32.234	be-2311-pe11.seattle.wa.ibone.comcast.net	18.2	15.6	*	40.7
9		119	142.251.229.139	142.251.229.139	17.7	15.2	17.0	
10		79	192.178.105.46	192.178.105.46	18.5	16.4	19.4	
11		44	216.239.57.194	216.239.57.194	25.2	22.7	25.3	
12		44	192.178.74.210	192.178.74.210	59.0	56.6	59.6	
13		44	192.178.73.72	192.178.73.72	81.3	78.0	82.3	

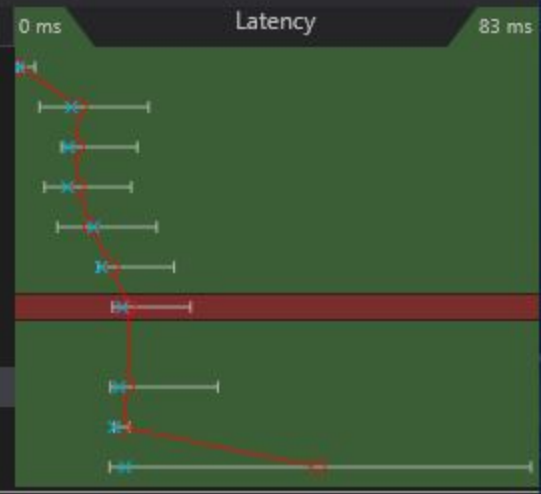
PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud to share live, read-only data with your customers. Try Now

www.google.com / 142.250.73.68 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.6	
2		239	96.120.103.145	96.120.103.145	10.4	3.9	9.0	
3		132	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	9.9	7.4	8.6	
4		239	96.216.66.137	po-100-xar01.bremerton.wa.seattle.comcast.net	10.1	4.7	8.4	
5		239	96.216.66.121	be-310-arsc1.burien.wa.seattle.comcast.net	12.1	6.8	12.6	
6		13	68.86.94.141	be-36141-cs04.portland.or.ibone.comcast.net	15.5	13.4	13.8	
7	121	239	96.110.32.234	be-2311-pe11.seattle.wa.ibone.comcast.net	18.2	15.6	17.2	50.6
	132		-				*	100.0
9		120	142.251.70.103	142.251.70.103	18.0	15.3	16.7	
10		13	142.250.233.135	142.250.233.135	17.2	15.9	15.9	
11		239	142.250.73.68	www.google.com	48.6	15.1	17.6	
		239		**Round Trip (ms)**	48.6	15.1	17.6	



Focus: 12:36:20a - 12:46:20a

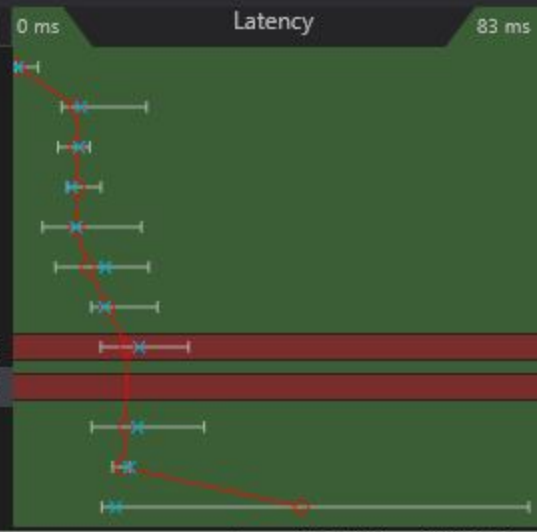
PingPlotter Free

File Edit Tools Help

Test new hire connections before remote work begins with PingPlotter Cloud. Try Now

www.google.com / 142.250.73.100 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.8	0.4	0.7	
2		239	96.120.103.145	96.120.103.145	10.1	7.8	10.9	
3		9	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	10.1	7.2	10.6	
4		9	69.139.163.129	po-2-rur01.bremerton.wa.seattle.comcast.net	10.3	8.7	9.3	
5		239	96.216.66.137	po-100-xar01.bremerton.wa.seattle.comcast.net	10.1	4.7	10.1	
6		239	96.216.66.121	be-310-arsc1.burien.wa.seattle.comcast.net	12.0	6.8	14.8	
7		119	68.86.94.129	be-36111-cs01.portland.or.ibone.comcast.net	15.0	12.5	14.6	
8	110	239	96.110.32.234	be-2311-pe11.seattle.wa.ibone.comcast.net	18.3	14.0	20.2	46.0
	8	8	96.110.32.226	be-2111-pe11.seattle.wa.ibone.comcast.net			*	100.0
10		129	142.251.70.103	142.251.70.103	18.1	12.6	19.9	
11		9	142.251.64.87	142.251.64.87	17.4	16.0	18.6	
12		239	142.250.73.100	www.google.com	46.2	14.2	16.4	
		239		**Round Trip (ms)**	46.2	14.2	16.4	



Focus: 12:41:10a - 12:51:10a

PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud to share live, read-only data with your customers. Try Now

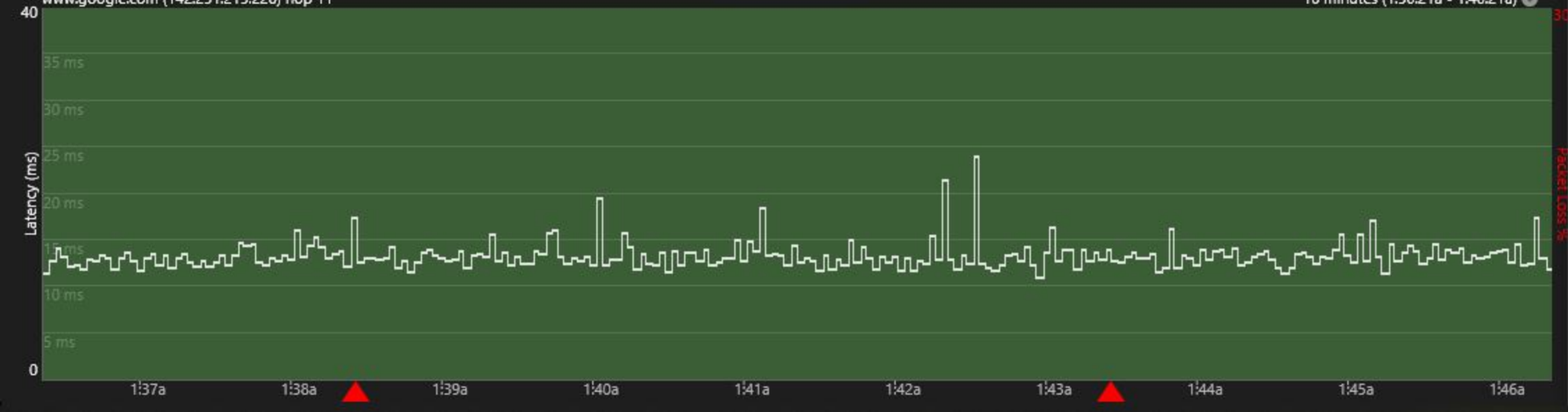
www.google.com / 142.251.215.228 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.8	0.4	0.6	
2		239	96.120.103.145	96.120.103.145	10.0	7.4	10.3	
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.9	6.7	10.2	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.9	7.2	9.5	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.1	11.0	13.5	
6	6	70	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	13.6	11.1	13.1	8.6
7	10	70	96.110.32.238	be-2411-pe11.seattle.wa.ibone.comcast.net	13.8	10.6	13.7	14.3
	239		-				*	100.0
9		70	142.251.70.97	142.251.70.97	14.1	12.8	13.2	
10		70	216.239.56.223	216.239.56.223	13.4	10.8	12.5	
11		239	142.251.215.228	www.google.com	13.2	10.8	13.0	
		239		**Round Trip (ms)**	13.2	10.8	13.0	

0 ms Latency 63 m

Focus: 1:36:21a - 1:46:21a

www.google.com (142.251.215.228) hop 11 10 minutes (1:36:21a - 1:46:21a)



1:46:23 AM

Friday, August 15, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Discover all of the connected devices on your network with PingPlotter Pro. Upgrade

www.google.com / 142.251.33.68 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.3	0.6	
2		239	96.120.103.145	96.120.103.145	9.8	7.4	9.8	
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.6	7.1	9.1	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.7	4.4	8.8	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.2	10.5	12.2	
6	5	239	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	13.3	9.8	12.1	2.1
7		35	96.110.34.130	be-2112-pe12.seattle.wa.ibone.comcast.net	13.3	11.8	15.9	
	239	239	96.110.34.134	be-2212-pe12.seattle.wa.ibone.comcast.net			*	100.0
9		35	108.170.255.127	108.170.255.127	14.2	12.1	13.3	
10		35	142.251.50.243	142.251.50.243	13.3	10.3	12.2	
11		239	142.251.33.68	www.google.com	12.9	10.7	13.4	
		239		**Round Trip (ms)**	12.9	10.7	13.4	

0 ms Latency 24 ms

Focus: 3:02:20a - 3:12:20a

www.google.com (142.251.33.68) hop 11 — 10 minutes (3:02:20a - 3:12:20a)

3:12:21 AM

Sunday, August 17, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

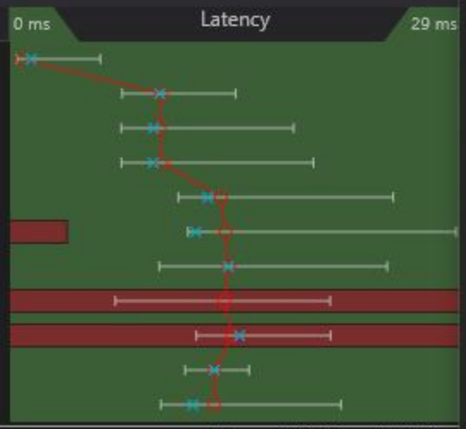
PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud if you need assisted troubleshooting tools. Try Now

www.google.com / 142.251.33.68 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.8	0.4	1.4	
2		239	96.120.103.145	96.120.103.145	9.7	7.2	9.6	
3		154	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	9.6	7.1	9.2	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	9.7	7.1	9.2	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.5	10.8	12.7	
6	6	154	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	13.8	11.4	11.9	3.9
7		34	96.110.34.130	be-2112-pe12.seattle.wa.ibone.comcast.net	14.0	9.6	14.0	
8	162	239	96.110.32.238	be-2411-pe11.seattle.wa.ibone.comcast.net	13.7	6.7	*	67.8
9	85	119	108.170.255.127	108.170.255.127	14.2	11.9	14.7	71.4
10		34	142.251.50.243	142.251.50.243	13.1	11.2	13.1	
11		239	142.251.33.68	www.google.com	13.1	9.7	11.7	
		239		**Round Trip (ms)**	13.1	9.7	11.7	



Focus: 3:42:16a - 3:52:16a

3:52:18 AM

Sunday, August 17, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

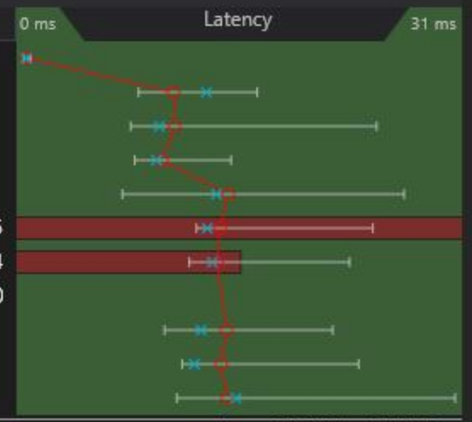
PingPlotter Free

File Edit Tools Help

PingPlotter alerts will notify you instantly of any issues. Upgrade

www.google.com / 142.250.217.68 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		25	192.168.0.1	Archer_AX55	0.7	0.5	0.7	
2		26	96.120.103.145	96.120.103.145	10.9	8.5	13.2	
3		26	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	11.0	8.0	10.0	
4		26	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.1	8.2	9.8	
5		26	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	14.8	7.4	13.9	
6	9	24	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	14.2	12.5	13.3	37.5
7	4	26	96.110.32.226	be-2111-pe11.seattle.wa.ibone.comcast.net	14.0	12.0	13.7	15.4
	26		-				*	100.0
9		26	142.251.229.135	142.251.229.135	14.6	10.3	12.9	
10		26	142.251.55.197	142.251.55.197	14.3	11.5	12.4	
11		26	142.250.217.68	www.google.com	14.7	11.2	15.3	
		26		**Round Trip (ms)**	14.7	11.2	15.3	



Focus: 5:04:05p - 5:07:04p

5:07:06 PM

Thursday, August 21, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Wondering which PingPlotter is best for you? Compare

www.google.com / 142.250.217.100 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.6	
2		239	96.120.103.145	96.120.103.145	11.1	4.0	9.2	
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	11.0	3.9	12.8	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.8	4.1	13.4	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.1	11.4	16.4	
6	25	118	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	14.5	11.8	*	21.2
7	12	119	96.110.32.226	be-2111-pe11.seattle.wa.ibone.comcast.net	14.6	8.9	12.8	10.1
	239	239	96.110.34.134	be-2212-pe12.seattle.wa.ibone.comcast.net			*	100.0
9		119	142.251.229.135	142.251.229.135	16.5	7.8	18.5	
10		119	142.251.55.197	142.251.55.197	14.5	11.5	12.4	
11		239	142.250.217.100	www.google.com	14.3	10.7	14.4	
		239		**Round Trip (ms)**	14.3	10.7	14.4	

0 ms Latency 89 ms

Focus: 6:21:05p - 6:31:05p

www.google.com (142.250.217.100) 10 minutes (6:21:05p - 6:31:05p)

50 45 ms 37.5 ms 30 ms 22.5 ms 15 ms 7.5 ms 0

Latency (ms) Packet Loss %

30

1p 6:22p 6:23p 6:24p 6:25p 6:26p 6:27p 6:28p 6:29p 6:30p 6:3

6:31:05 PM

Thursday, August 21, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Test new hire connections before remote work begins with PingPlotter Cloud. Try Now

www.google.com / 142.251.215.228 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.6	
2		239	96.120.103.145	96.120.103.145	13.5	4.2	9.0	
3		239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	13.9	6.1	21.3	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	13.1	5.0	10.9	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	18.5	7.5	13.1	
6	66	239	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	16.3	11.8	13.6	27.6
7	52	239	96.110.32.238	be-2411-pe11.seattle.wa.ibone.comcast.net	16.6	9.3	14.1	21.8
	239	239	96.110.34.134	be-2212-pe12.seattle.wa.ibone.comcast.net			*	100.0
9		239	142.251.70.97	142.251.70.97	17.1	10.3	21.4	
10		239	216.239.56.223	216.239.56.223	16.6	7.7	16.2	
11	1	239	142.251.215.228	www.google.com	15.9	7.5	21.4	0.4
	1	239		**Round Trip (ms)**	15.9	7.5	21.4	0.4

0 ms Latency 274 ms

Focus: 8:29:52p - 8:39:52p

www.google.com (142.251.215.228) hop 11 10 minutes (8:29:52p - 8:39:52p)

90 80 ms 70 ms 60 ms 50 ms 40 ms 30 ms 20 ms 10 ms 0

Latency (ms) Packet Loss %

8:30p 8:31p 8:32p 8:33p 8:34p 8:35p 8:36p 8:37p 8:38p 8:39p

8:39:52 PM

Thursday, August 21, 2025

August 2025

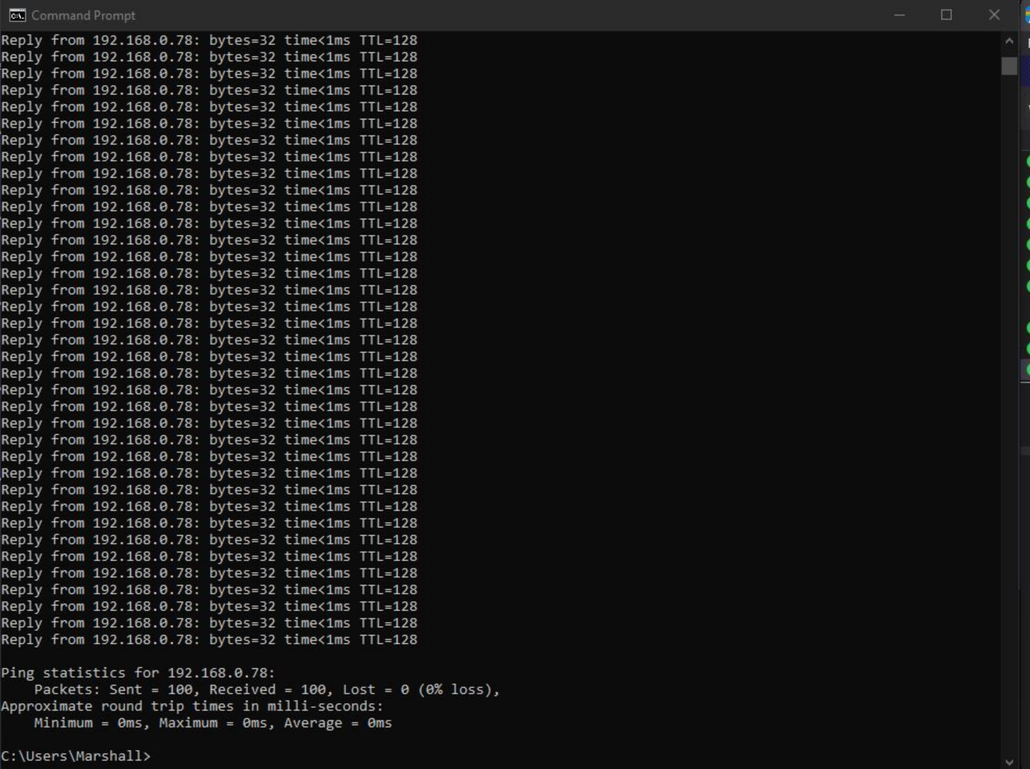
Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

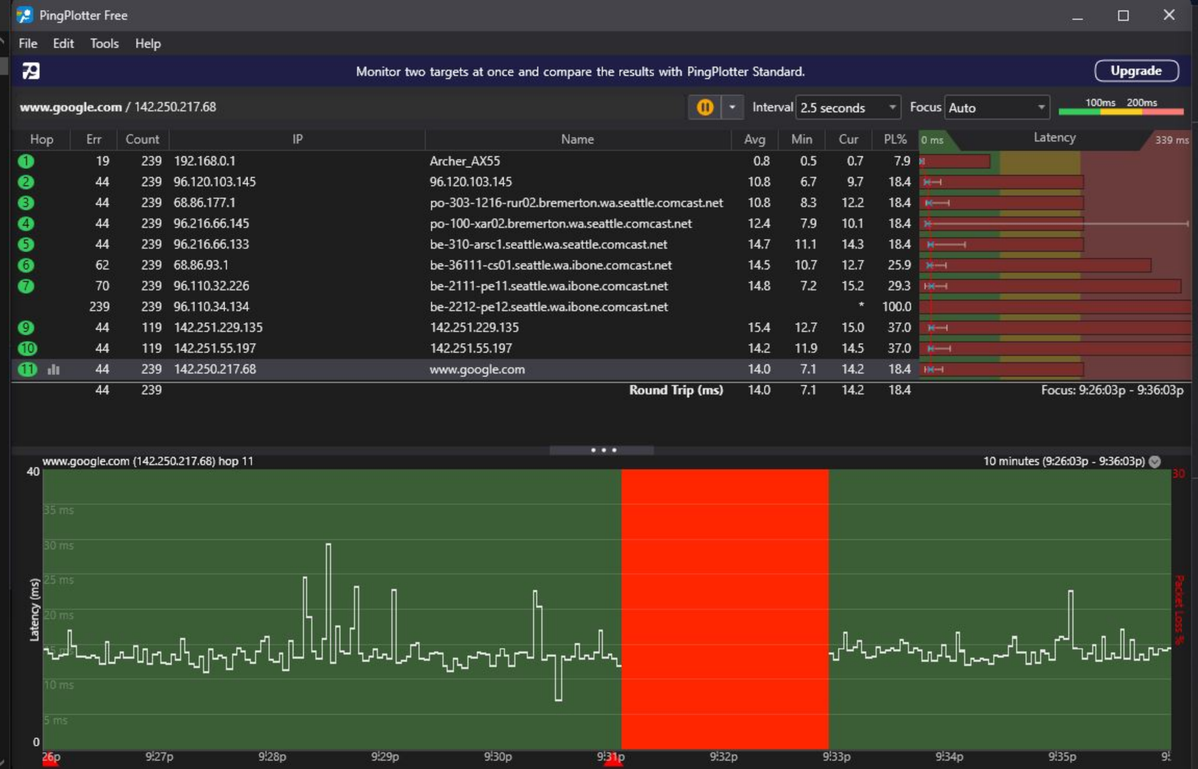
Today

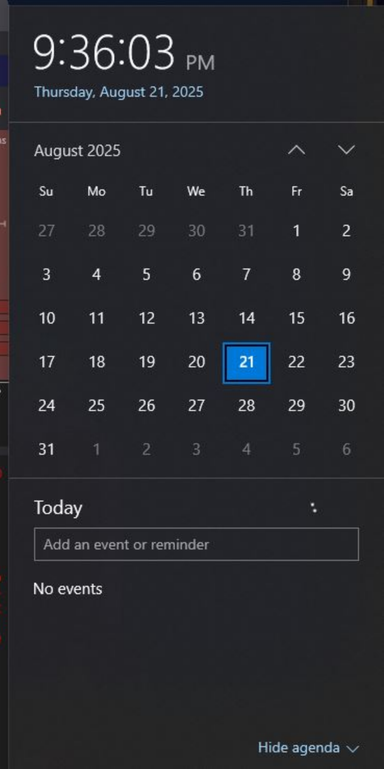
Add an event or reminder

No events

Hide agenda


Command Prompt
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.0.78:
Packets: Sent = 100, Received = 100, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Users\Marshall>


PingPlotter Free
File Edit Tools Help
Monitor two targets at once and compare the results with PingPlotter Standard.
Upgrade
www.google.com / 142.250.217.68
Interval 2.5 seconds
Focus Auto
100ms 200ms
Hop Err Count IP Name Avg Min Cur PL% Latency
0 ms 339 ms
1 19 239 192.168.0.1 Archer_AX55 0.8 0.5 0.7 7.9
2 44 239 96.120.103.145 96.120.103.145 10.8 6.7 9.7 18.4
3 44 239 68.86.177.1 po-303-1216-rur02.bremerton.wa.seattle.comcast.net 10.8 8.3 12.2 18.4
4 44 239 96.216.66.145 po-100-xar02.bremerton.wa.seattle.comcast.net 12.4 7.9 10.1 18.4
5 44 239 96.216.66.133 be-310-arsc1.seattle.wa.seattle.comcast.net 14.7 11.1 14.3 18.4
6 62 239 68.86.93.1 be-36111-cs01.seattle.wa.ibone.comcast.net 14.5 10.7 12.7 25.9
7 70 239 96.110.32.226 be-2111-pe11.seattle.wa.ibone.comcast.net 14.8 7.2 15.2 29.3
239 239 96.110.34.134 be-2212-pe12.seattle.wa.ibone.comcast.net * 100.0
9 44 119 142.251.229.135 142.251.229.135 15.4 12.7 15.0 37.0
10 44 119 142.251.55.197 142.251.55.197 14.2 11.9 14.5 37.0
11 44 239 142.250.217.68 www.google.com 14.0 7.1 14.2 18.4
44 239 Round Trip (ms) 14.0 7.1 14.2 18.4
Focus: 9:26:03p - 9:36:03p
www.google.com (142.250.217.68) hop 11
10 minutes (9:26:03p - 9:36:03p)
Latency (ms)
Packet Loss %
40
35 ms
30 ms
25 ms
20 ms
10 ms
5 ms
0
26p 9:27p 9:28p 9:29p 9:30p 9:31p 9:32p 9:33p 9:34p 9:35p


9:36:03 PM
Thursday, August 21, 2025
August 2025
Su Mo Tu We Th Fr Sa
27 28 29 30 31 1 2
3 4 5 6 7 8 9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31 1 2 3 4 5 6
Today
Add an event or reminder
No events
Hide agenda

Select Command Prompt - ping 192.168.0.78 -n 100

```
Pinging 192.168.0.78 with 32 bytes of data:
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
Reply from 192.168.0.78: bytes=32 time<1ms TTL=128
```

PingPlotter Free

File Edit Tools Help

Measure jitter and mean opinion score (MOS) with PingPlotter Professional. Upgrade

www.google.com / 142.250.217.68 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1	19	239	192.168.0.1	Archer_AX55	0.8	0.5	0.9	7.9
2	44	239	96.120.103.145	96.120.103.145	10.7	6.7	9.7	18.4
3	44	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	10.7	8.3	10.5	18.4
4	44	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	12.4	7.9	10.0	18.4
5	44	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	14.5	11.8	17.1	18.4
6	55	239	68.86.93.1	be-36111-cs01.seattle.wa.ibone.comcast.net	14.4	10.7	15.6	23.0
7	73	239	96.110.32.226	be-2111-pe11.seattle.wa.ibone.comcast.net	14.6	7.2	12.8	30.5
	239	239	96.110.34.134	be-2212-pe12.seattle.wa.ibone.comcast.net			*	100.0
9	44	119	142.251.229.135	142.251.229.135	16.2	12.7	16.8	37.0
10	44	119	142.251.55.197	142.251.55.197	14.6	11.8	17.4	37.0
11	44	239	142.250.217.68	www.google.com	14.2	7.1	14.1	18.4
	44	239		Round Trip (ms)	14.2	7.1	14.1	18.4

Latency 0 ms 339 ms Focus: 9:23:51p - 9:33:51p

9:33:52 PM

Thursday, August 21, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Monitor two targets at once and compare the results with PingPlotter Standard. Upgrade

www.google.com / 142.250.73.132 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.8	
2		239	96.120.103.145	96.120.103.145	10.1	8.1	10.6	
3		59	68.86.98.169	po-303-1215-rur01.bremerton.wa.seattle.comcast.net	10.1	8.2	9.9	
4		59	69.139.163.130	po-2-rur02.bremerton.wa.seattle.comcast.net	10.0	6.0	6.0	
5		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.0	4.8	15.2	
6		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	13.5	7.8	13.7	
7		58	68.86.93.5	be-36121-cs02.seattle.wa.ibone.comcast.net	13.8	12.4	13.2	
8	180	239	96.110.34.134	be-2212-pe12.seattle.wa.ibone.comcast.net	14.0	12.0	15.3	75.3
9	59	179	142.251.70.97	142.251.70.97	14.1	12.5	*	33.0
10		59	192.178.105.141	192.178.105.141	13.3	11.4	13.9	
11		59	142.251.229.77	142.251.229.77	13.4	11.7	13.7	
12		239	142.250.73.132	www.google.com	13.5	8.1	22.7	
		239		**Round Trip (ms)**	13.5	8.1	22.7	

0 ms Latency 32 ms

Focus: 4:05:44a - 4:15:44a

www.google.com (142.250.73.132) hop 12 10 minutes (4:05:44a - 4:15:44a)

4:15:46 AM

Saturday, August 23, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Monitor hundreds of computers in a central dashboard with PingPlotter Cloud. Try Now

www.google.com / 142.251.215.228 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.6	
2		239	96.120.103.145	96.120.103.145	10.6	5.9	11.4	
3		119	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	10.8	8.4	10.1	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.7	5.7	10.0	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	14.8	10.4	13.9	
6	22	119	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	14.5	11.8	13.6	18.5
7	14	118	96.110.32.238	be-2411-pe11.seattle.wa.ibone.comcast.net	14.6	9.4	13.0	11.9
8	119	239	96.110.34.134	be-2212-pe12.seattle.wa.ibone.comcast.net	14.0	11.0	*	49.8
9		119	142.251.70.97	142.251.70.97	14.8	9.7	14.1	
10		119	216.239.56.223	216.239.56.223	14.4	11.9	13.3	
11		239	142.251.215.228	www.google.com	13.9	7.3	13.2	
		239		**Round Trip (ms)**	13.9	7.3	13.2	

0 ms Latency 74 ms

Focus: 1:40:26p - 1:50:26p

1:50:27 PM

Sunday, August 24, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

PingPlotter Free

File Edit Tools Help

Monitor hundreds of computers in a central dashboard with PingPlotter Cloud. Try Now

www.google.com / 142.251.215.228 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%
1		239	192.168.0.1	Archer_AX55	0.7	0.4	0.6	
2		239	96.120.103.145	96.120.103.145	10.6	5.9	11.4	
3		119	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.net	10.8	8.4	10.1	
4		239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	10.7	5.7	10.0	
5		239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	14.8	10.4	13.9	
6	22	119	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	14.5	11.8	13.6	18.5
7	14	118	96.110.32.238	be-2411-pe11.seattle.wa.ibone.comcast.net	14.6	9.4	13.0	11.9
8	119	239	96.110.34.134	be-2212-pe12.seattle.wa.ibone.comcast.net	14.0	11.0	*	49.8
9		119	142.251.70.97	142.251.70.97	14.8	9.7	14.1	
10		119	216.239.56.223	216.239.56.223	14.4	11.9	13.3	
11		239	142.251.215.228	www.google.com	13.9	7.3	13.2	
		239		**Round Trip (ms)**	13.9	7.3	13.2	

0 ms Latency 74 ms

Focus: 1:40:26p - 1:50:26p

1:50:27 PM

Sunday, August 24, 2025

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Today

Add an event or reminder

No events

Hide agenda

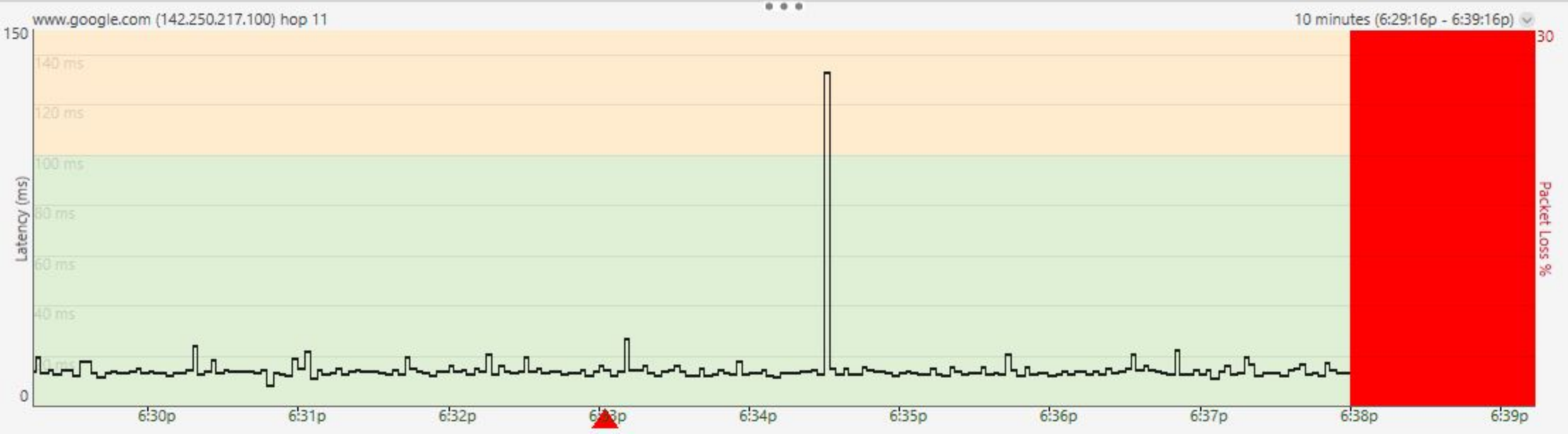
PingPlotter Free

File Edit Tools Help

Try PingPlotter Cloud to share live, read-only data with your customers. Try Now

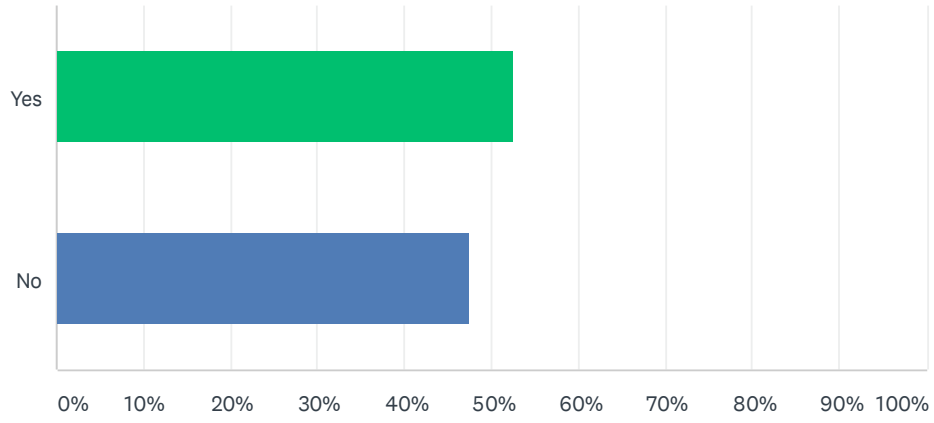
www.google.com / 142.250.217.100 Interval 2.5 seconds Focus Auto 100ms 200ms

Hop	Err	Count	IP	Name	Avg	Min	Cur	PL%	Latency (0 ms – 136 m)
1	18	239	192.168.0.1	Archer_AX55	0.8	0.4	0.7	7.5	
2	30	239	96.120.103.145	96.120.103.145	11.6	4.3	*	12.6	
3	30	239	68.86.177.1	po-303-1216-rur02.bremerton.wa.seattle.comcast.ne	11.4	5.7	*	12.6	
4	30	239	96.216.66.145	po-100-xar02.bremerton.wa.seattle.comcast.net	11.0	4.7	*	12.6	
5	30	239	96.216.66.133	be-310-arsc1.seattle.wa.seattle.comcast.net	15.8	6.7	*	12.6	
6	64	148	68.86.93.13	be-36141-cs04.seattle.wa.ibone.comcast.net	14.8	12.2	*	43.2	
7	30	149	96.110.34.142	be-2412-pe12.seattle.wa.ibone.comcast.net	15.1	12.2	*	20.1	
	239	239	96.110.32.238	be-2411-pe11.seattle.wa.ibone.comcast.net			*	100.0	
9	30	149	108.170.255.127	108.170.255.127	15.1	9.7	*	20.1	
10	30	149	142.251.55.201	142.251.55.201	13.7	8.7	*	20.1	
11	30	239	142.250.217.100	www.google.com	14.6	8.4	*	12.6	
	30	239		**Round Trip (ms)**	14.6	8.4	*	12.6	Focus: 6:29:16p - 6:39:16p



Q1 Does your household or business currently subscribe to cable TV service from Comcast?

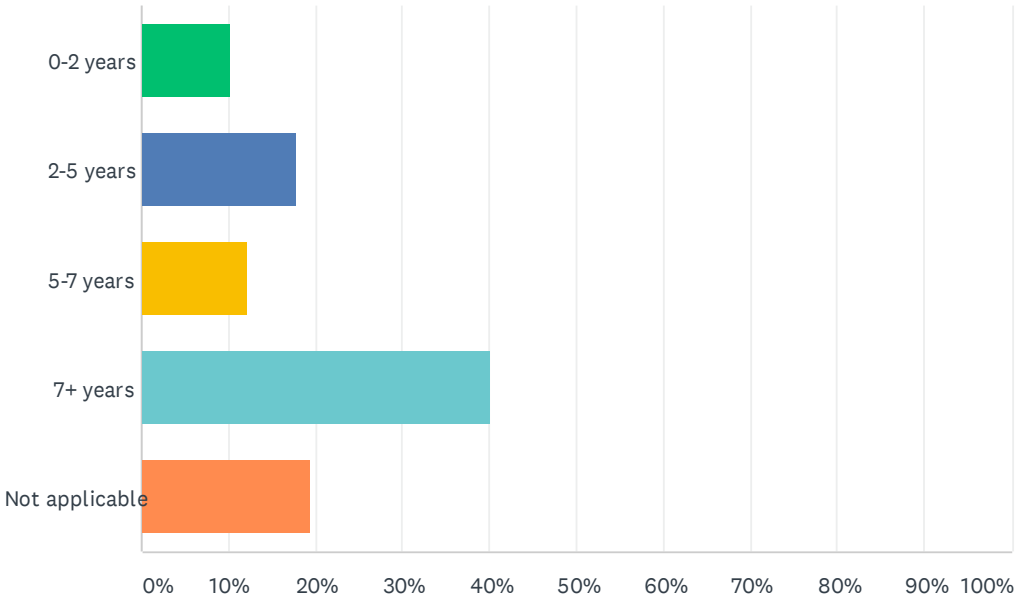
Answered: 175 Skipped: 2



ANSWER CHOICES	RESPONSES	
Yes	52.57%	92
No	47.43%	83
TOTAL		175

Q2 About how long has your household or business subscribed to cable TV service from Comcast, now or in the past?

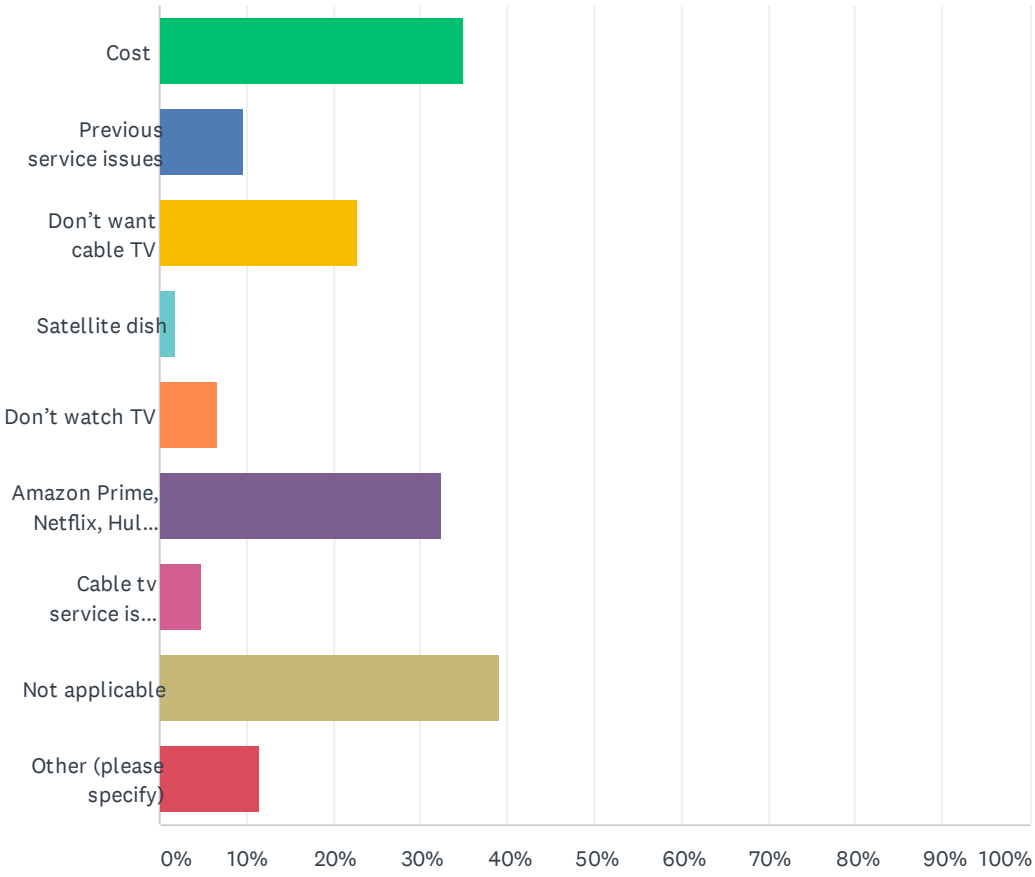
Answered: 174 Skipped: 3



ANSWER CHOICES	RESPONSES	
0-2 years	10.34%	18
2-5 years	17.82%	31
5-7 years	12.07%	21
7+ years	40.23%	70
Not applicable	19.54%	34
TOTAL		174

Q3 For what reasons are you not currently subscribing to cable TV service? Mark all that apply.

Answered: 166 Skipped: 11

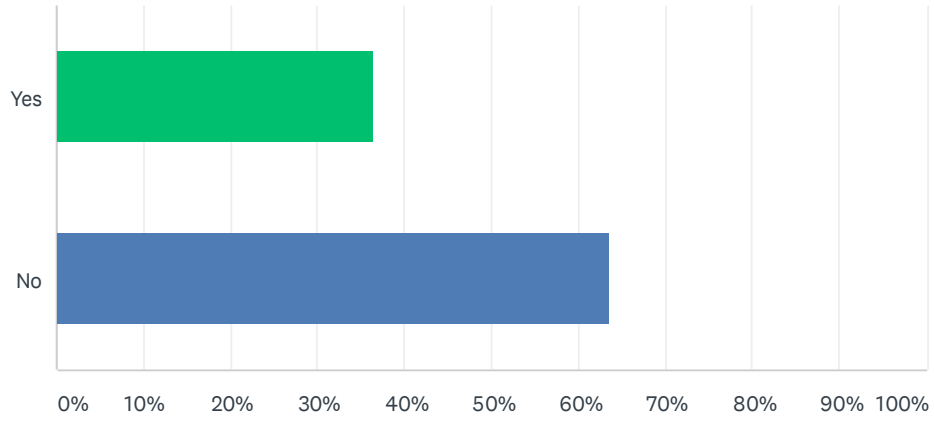


ANSWER CHOICES	RESPONSES	
Cost	34.94%	58
Previous service issues	9.64%	16
Don't want cable TV	22.89%	38
Satellite dish	1.81%	3
Don't watch TV	6.63%	11
Amazon Prime, Netflix, Hulu, etc.	32.53%	54
Cable tv service is unavailable	4.82%	8
Not applicable	39.16%	65
Other (please specify)	11.45%	19
Total Respondents: 166		

#	OTHER (PLEASE SPECIFY)	DATE
1	I watch all videos online.	9/26/2020 2:27 PM
2	Don't watch biased channels.	9/25/2020 11:43 AM
3	Poor Quality, Better Options from Streaming Services	9/25/2020 9:28 AM
4	Cost	9/25/2020 7:05 AM
5	Too expensive for the few select channels we watched. Cost prohibitive to move up package levels.	9/24/2020 7:15 AM
6	Inability to select what we wanted to see. The “packages” include too much crappy stuff.	9/23/2020 11:34 PM
7	Comcast is just the worst	9/22/2020 3:13 PM
8	They are a monopoly and I don’t like monopolies. We should have competition for Internet and cable.	9/14/2020 10:22 AM
9	Comcast will not serve our property because they said our driveway is too long.	9/1/2020 9:17 PM
10	do not have comcast	8/1/2020 5:08 PM
11	We do not have access to Comcast on Just A Meer Drive. None of our neighbors do either. We were told by Co.cast it would be in excess of $20,000 to obtain Comcast	8/1/2020 10:44 AM
12	The bulk TV packages are tiered - the lower end is full of crap paid programming, and the rest is simply too expensive for us, relative to a la carte streaming options. Plus, the convertor box expense and set up are ridiculous - Comcast bricked our DVRs with that one. Why bother with Comcast??	8/1/2020 10:41 AM
13	Billing increase without prior notification	8/1/2020 4:59 AM
14	We decide to upgrade internet service and go to streaming video.	7/31/2020 10:50 PM
15	Horrible company with which to work	7/31/2020 10:05 PM
16	Cost	7/31/2020 9:59 PM
17	Not available on my street	7/31/2020 9:52 PM
18	Horrible customer service, increased fees w/o reason	7/31/2020 6:34 PM
19	Their customer service is HORRIBLE!!!	7/31/2020 8:56 AM

Q4 Is there anything Comcast could do to interest you in subscribing to cable TV?

Answered: 143 Skipped: 34



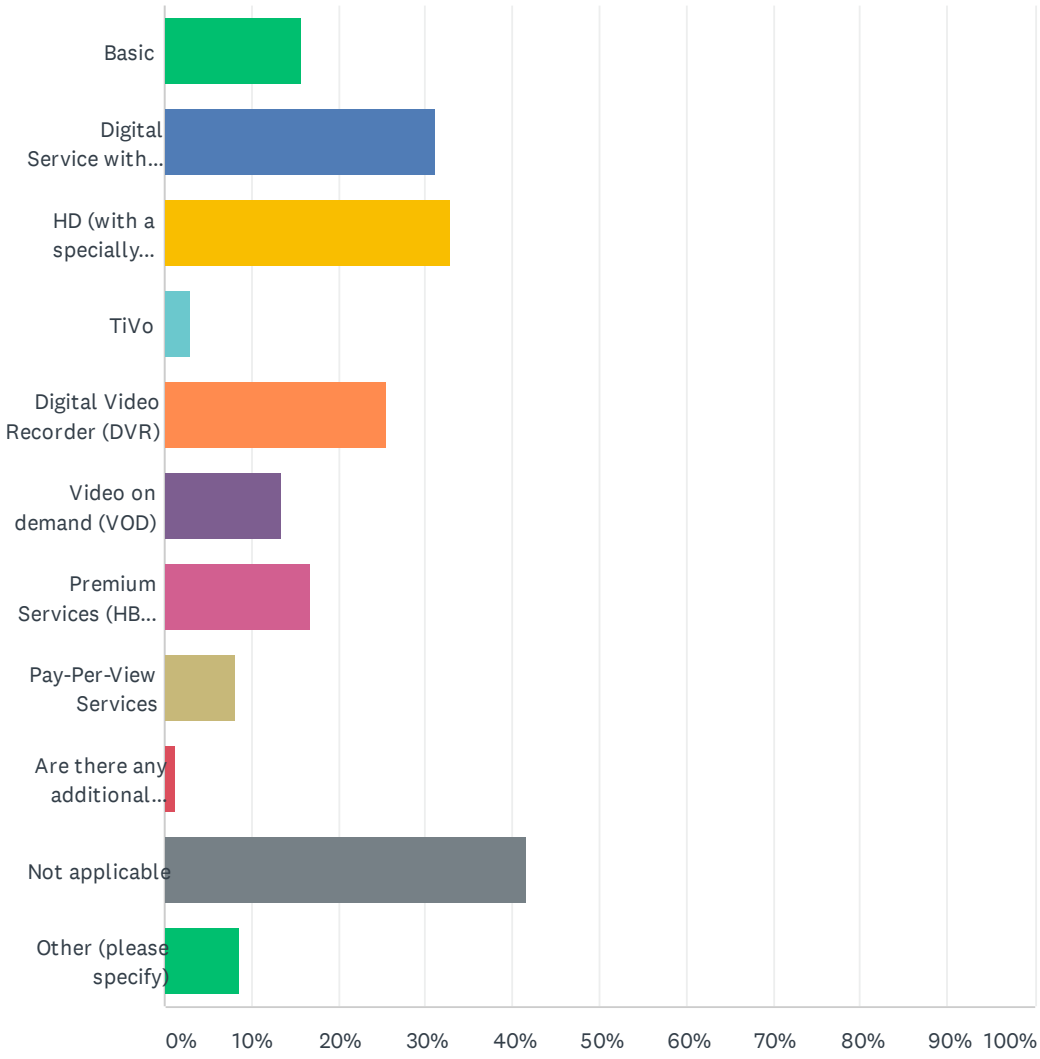
ANSWER CHOICES	RESPONSES	
Yes	36.36%	52
No	63.64%	91
TOTAL		143

#	IF "YES" PLEASE SPECIFY:	DATE
1	Allow us to choose only those channels we want and have available most/all the channels we want	9/27/2020 3:04 PM
2	N/A I have Comcast but this question requires an answer	9/25/2020 6:04 PM
3	Bundles need to be renegotiated every two years to keep the rates lower. Just lower the rates, please!	9/25/2020 8:45 AM
4	Make specific channels available for a low cost. I may want a specific sports channel, but I do not want 20 other channels bundled with it. But, Comcast knows this. It is simply a profit generating formula.	9/25/2020 8:42 AM
5	Lower cost; month-to-month plans with add-ons	9/25/2020 7:15 AM
6	cost	9/25/2020 7:05 AM
7	price decrease	9/24/2020 11:14 AM
8	Have more selectivity in what you can choose to subscribe to.	9/23/2020 11:34 PM
9	Lower the price for basic TV and keep their bills at that price. In the past their bills increase significantly every month.	9/23/2020 2:43 PM
10	Provide service to my address	9/22/2020 10:16 PM
11	make it equal to and cheaper than directv	9/22/2020 3:40 PM
12	Not be Comcast	9/22/2020 3:13 PM
13	Offer internet service to our address	9/22/2020 2:05 PM
14	Stop bundling to increase fees especially regional sports network fees of "subsidaries" they own just so they can collect an extra $18	9/18/2020 2:10 PM
15	Reduce prices by offering smaller packages	9/15/2020 1:40 PM
16	Lower cost	9/14/2020 6:31 PM
17	Lower rates	9/14/2020 5:42 PM
18	Lower monthly cost	9/14/2020 4:59 PM
19	Community TV	9/14/2020 10:02 AM
20	Already subscribe	9/14/2020 9:30 AM
21	Lower cost	9/14/2020 9:06 AM
22	lower prices	9/13/2020 9:03 PM
23	This survey is broken. I've already answered "yes, I am a current subscriber".	9/12/2020 4:44 PM
24	Decrease prices. Allow customers to buy (instead of rent) equipment.	9/11/2020 11:17 AM
25	Allow us to connect.	9/1/2020 9:17 PM
26	Better more customizable options at lower price	8/9/2020 11:56 AM
27	Completely overhaul the customer service model... It is off-the-charts horrible. Almost impossible to ever speak with a human being.	8/7/2020 11:12 PM
28	Increase speed and intermittent latency issues	8/2/2020 6:12 PM
29	Continue with discounted services (e.g. on premium channels, internet) with specific years of customer loyalty. It seems that each year the service fees increase, and one has to negotiate a "fresh" deal with Comcast to lower the cost - this is a tiresome exercise!	8/2/2020 11:55 AM
30	Provide service to our house	8/1/2020 11:57 AM
31	Reduce price to reasonable omount for installation	8/1/2020 10:44 AM
32	Reduce the cost	8/1/2020 8:48 AM

33	include hbo , Disney, etc	8/1/2020 8:48 AM
34	Stop predatory billing practices such as increased billing without notification.	8/1/2020 4:59 AM
35	Unsure -- I had a very bad experience working with them, so not sure what could draw me back.	7/31/2020 10:05 PM
36	Lower cost	7/31/2020 9:59 PM
37	Provide service	7/31/2020 9:52 PM
38	Connect service	7/31/2020 8:09 PM
39	Lower prices	7/31/2020 8:01 PM
40	A la carte channels would be interesting	7/31/2020 7:43 PM
41	Extend service to my street	7/31/2020 7:02 PM
42	Better customer service, decrease prices, stop ridiculous fees, better customer control of subscribed channels	7/31/2020 6:34 PM
43	Lower the cost	7/31/2020 6:06 PM
44	Cost and choice of channels	7/31/2020 6:02 PM
45	Provide service.	7/31/2020 5:56 PM
46	Offer ala carte services to lower the cost.	7/31/2020 12:43 PM
47	I subscribe already	7/31/2020 9:51 AM
48	Remove commercials. If I have to pay for cable, then no commercials. Otherwise, make cable free. Netflix is the new model.	7/31/2020 9:48 AM
49	Lower rates, perhaps offer a sliding scale based on income	7/31/2020 9:23 AM
50	Better value, cost & customer service	7/31/2020 8:56 AM
51	Provide service to my house.	7/31/2020 8:44 AM
52	Lower basic cable cost	7/31/2020 8:42 AM

Q5 What cable services do you currently receive from Comcast? Mark all that apply.

Answered: 173 Skipped: 4

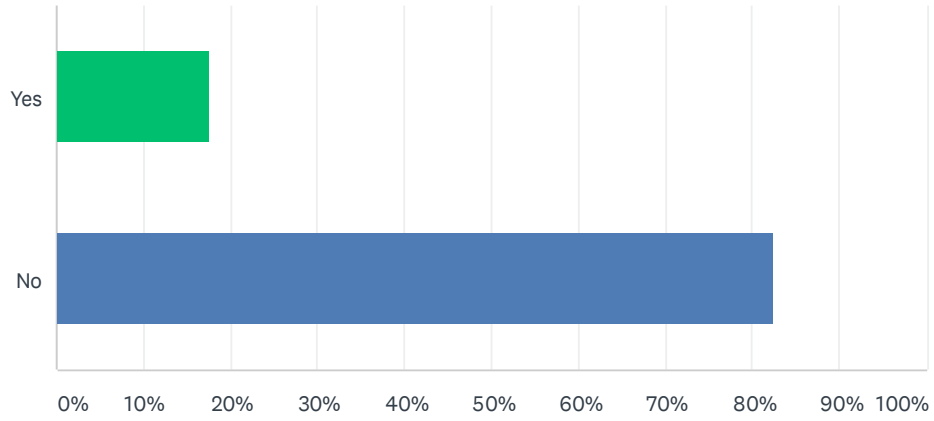


ANSWER CHOICES	RESPONSES	
Basic	15.61%	27
Digital Service with expanded channel line-up (CNN, ESPN, etc.)	31.21%	54
HD (with a specially designed set-top box used to receive High Definition programming)	32.95%	57
TiVo	2.89%	5
Digital Video Recorder (DVR)	25.43%	44
Video on demand (VOD)	13.29%	23
Premium Services (HBO, Showtime, etc.)	16.76%	29
Pay-Per-View Services	8.09%	14
Are there any additional cable services that you would like Comcast to consider?	1.16%	2
Not applicable	41.62%	72
Other (please specify)	8.67%	15
Total Respondents: 173		

#	OTHER (PLEASE SPECIFY)	DATE
1	Nothing now. Did have basic cable	9/23/2020 11:34 PM
2	Internet service only	9/22/2020 4:06 PM
3	internet only	9/22/2020 3:40 PM
4	Internet	9/22/2020 3:24 PM
5	Internet only	9/14/2020 9:23 AM
6	Internet	8/7/2020 11:12 PM
7	reliable high speed internet service, that does not go done	8/5/2020 7:19 PM
8	Internet	8/1/2020 1:06 PM
9	None	8/1/2020 10:44 AM
10	Just internet	7/31/2020 9:59 PM
11	Internet	7/31/2020 8:01 PM
12	Internet only	7/31/2020 6:42 PM
13	Internet	7/31/2020 6:34 PM
14	Home Security	7/31/2020 10:30 AM
15	Affordable WiFi and phone package	7/31/2020 9:23 AM

Q6 Are there any additional cable services that you would like Comcast to consider?

Answered: 170 Skipped: 7

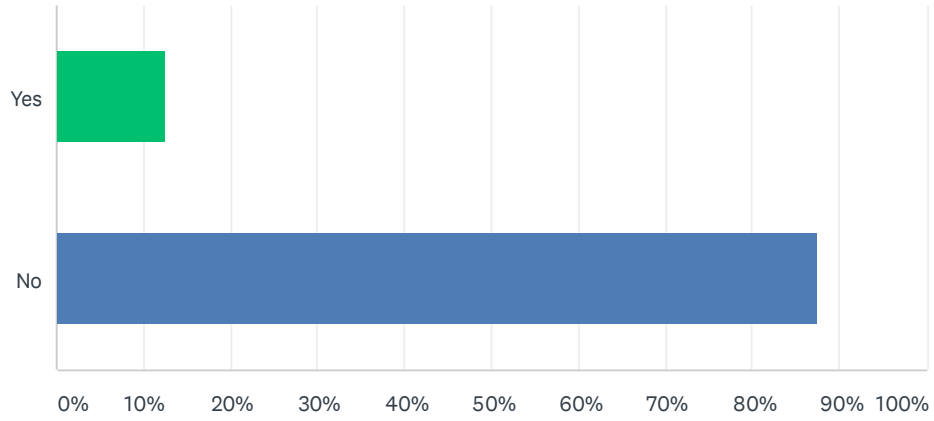


ANSWER CHOICES	RESPONSES	
Yes	17.65%	30
No	82.35%	140
TOTAL		170

#	IF "YES" PLEASE SPECIFY:	DATE
1	Cable TV Service other than most basic service	9/26/2020 8:09 AM
2	Put Starz back into the premium package rather than separate subscription	9/25/2020 6:04 PM
3	High bandwidth internet without having to buy into triple play.	9/25/2020 8:45 AM
4	Doubtful to engage Comcast given their pricing structure, as well as their support for progressive agenda programming	9/25/2020 8:42 AM
5	I hit yes because my answer is NO but that is because I don't know what else exists other than what I have.	9/24/2020 5:42 AM
6	Comcast removed some programing from the pkg I subscribed to (TCM for example) and moved them to the sports pkg, which I don't want.	9/23/2020 8:37 PM
7	More of a pick what channels you want and not the stupid bundling thing they do now. Yo get one or two channels I want I have to pay for dozens I never look at!!	9/23/2020 3:32 PM
8	I would like to get high speed internet only service without programming. I would like menu options rather than pre-determined packages	9/23/2020 1:33 PM
9	The ability to select your channels - ie, 20 channels for a certain price and subscriber gets to choose the channels (excepting premiums like HBO)	9/22/2020 4:10 PM
10	fiber optics	9/14/2020 5:42 PM
11	Actually recording programs that we want to record, rather than recording the times that programs are scheduled to be on. When programs shift time (for whatever reason), the recordings clip beginnings/ends. Seems like a stupid limitation.	9/14/2020 4:59 PM
12	ACC Network	9/14/2020 10:34 AM
13	Community TV via BARN	9/14/2020 10:02 AM
14	Allowing an ala carte option--pick and choose your channels	9/14/2020 9:09 AM
15	high speed internet service that does not go down	8/5/2020 7:19 PM
16	Better internet	8/2/2020 6:12 PM
17	Need to consider having local high school students (BHS & EHHS) "running" a local TV station - would help students with education credits, and experience, for working in broadcasting/journalism.	8/2/2020 11:55 AM
18	Apple TV and Disney+	8/1/2020 9:25 AM
19	Bundle with a handful of premium channels selected by the subscriber	8/1/2020 8:48 AM
20	Would like to have a choice	8/1/2020 7:54 AM
21	Fiber optics cable	7/31/2020 10:14 PM
22	island-wide fiber optic cable so we wouldn't need wireless, particularly 5G	7/31/2020 10:05 PM
23	Service to my area	7/31/2020 9:52 PM
24	Fiber optic	7/31/2020 9:03 PM
25	High speed internet	7/31/2020 8:09 PM
26	Bundled streaming service subs.	7/31/2020 7:43 PM
27	All access cbs	7/31/2020 7:25 PM
28	Ensure broadband access to all homes needing it for work and school from home.	7/31/2020 6:09 PM
29	Fiber optic	7/31/2020 6:02 PM
30	High speed reliable internet	7/31/2020 11:20 AM
31	Comcast needs to pick up the shows offered by Hulu, CBS All Access, etc.	7/31/2020 10:45 AM

Q7 Are there any cable programs that are not available that you would like Comcast to add?

Answered: 166 Skipped: 11

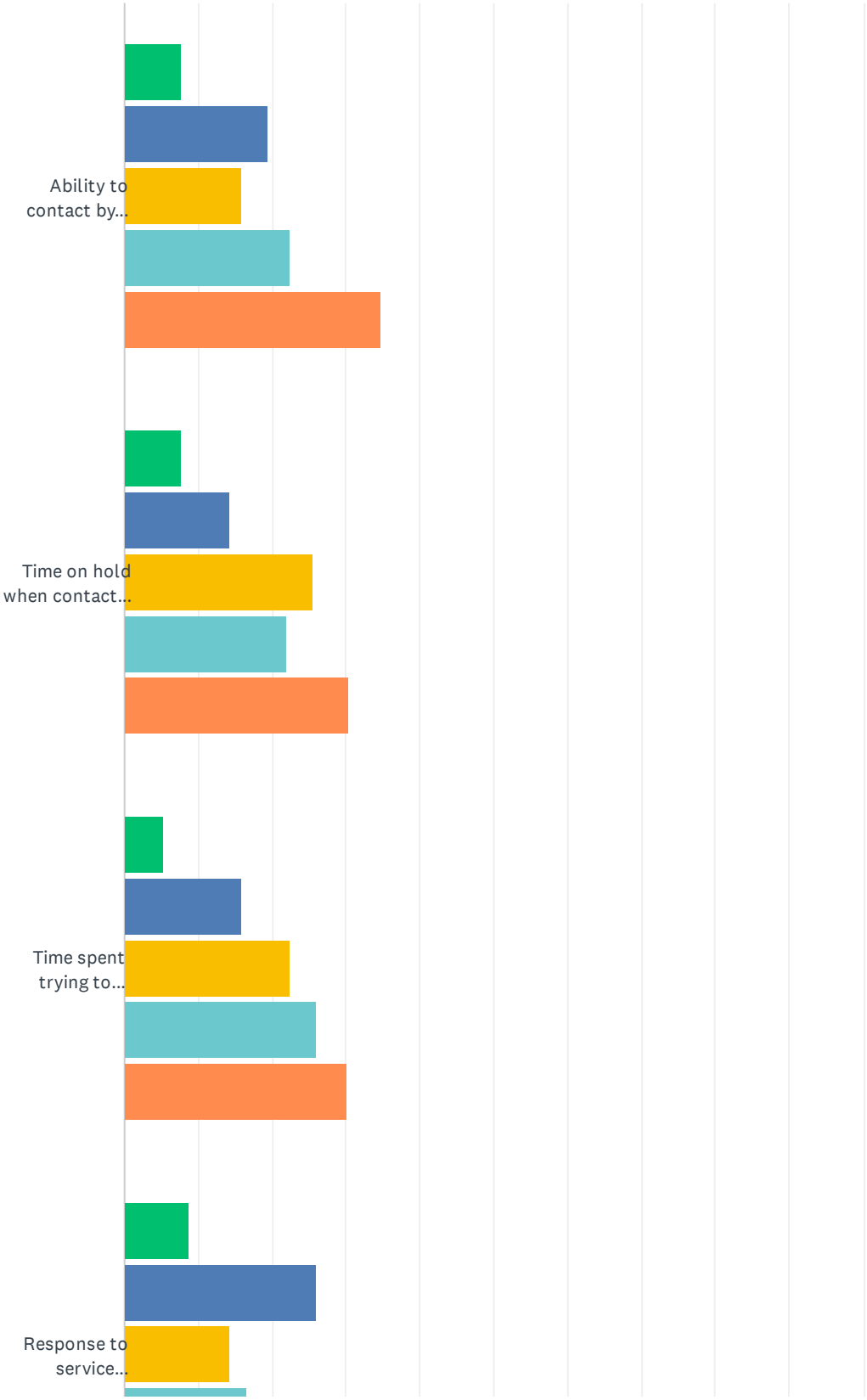


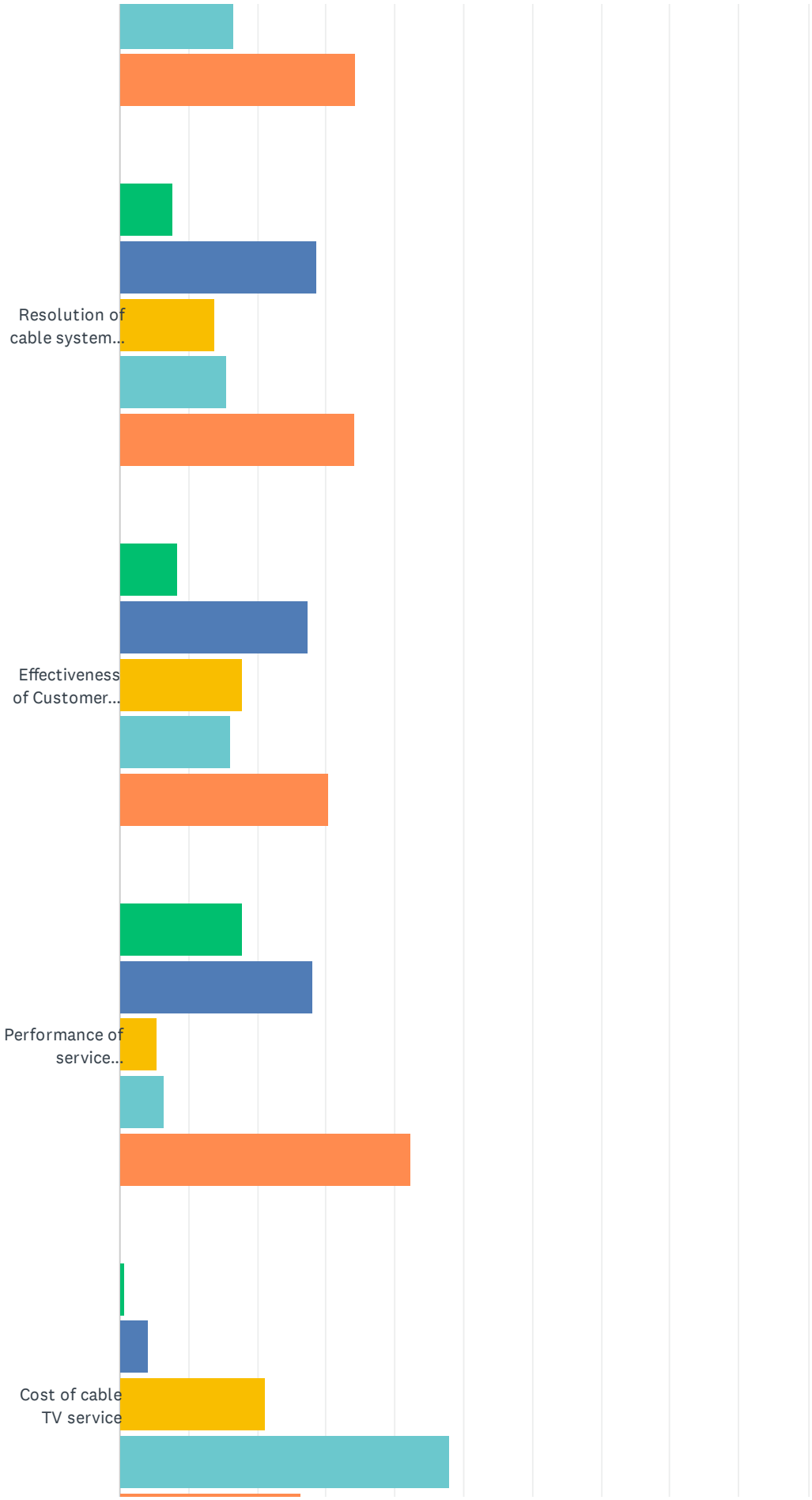
ANSWER CHOICES	RESPONSES	
Yes	12.65%	21
No	87.35%	145
TOTAL		166

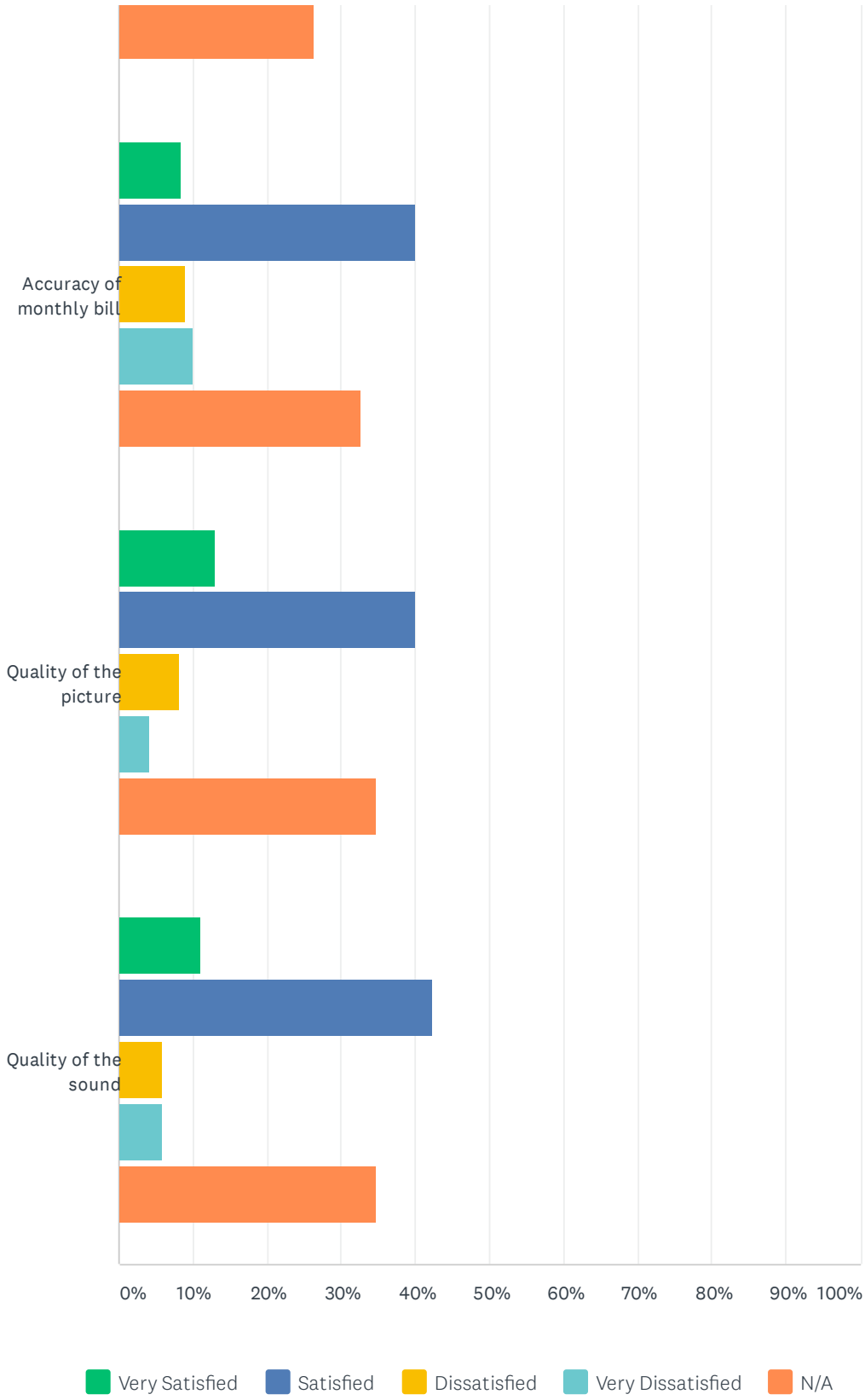
#	IF "YES" PLEASE SPECIFY:	DATE
1	Basic TV service has few channels, more channels would be better.	9/26/2020 8:09 AM
2	Again, if Comcast was the only provider of content, I would be without content.	9/25/2020 8:42 AM
3	Amazon Prime	9/24/2020 10:27 AM
4	more international programming	9/23/2020 8:37 PM
5	f/x, pop tv, acorn	9/22/2020 6:32 PM
6	Last I checked basic cable did not include NBC. It should.	9/22/2020 4:06 PM
7	Big 10 Network	9/14/2020 11:17 PM
8	Cooking Channel	9/14/2020 4:59 PM
9	local community access channel	9/13/2020 9:03 PM
10	High speed internet service that does not drop offer go down. Willing to pay more	8/5/2020 7:19 PM
11	In today's climate, it would be great to have some medical/health input on health promotion/education, disease prevention and management.	8/2/2020 11:55 AM
12	Any	8/1/2020 10:44 AM
13	international channels from UK and Australia	8/1/2020 9:49 AM
14	BBC	8/1/2020 8:48 AM
15	NBA games	7/31/2020 9:52 PM
16	Apple TV	7/31/2020 9:03 PM
17	All access cbs	7/31/2020 7:25 PM
18	I’m frustrated with streaming services being separate from cable offerings.	7/31/2020 6:23 PM
19	We subscribe to Prime, CBS All Access, Netflix, Hulu because Comcast doesn't offer most of the new shows.	7/31/2020 10:45 AM
20	All international networks	7/31/2020 9:23 AM

Q8 For each of the following, how satisfied have you been with Comcast's cable TV service over the last year?

Answered: 171 Skipped: 6




Resolution of cable system...
Effectiveness of Customer...
Performance of service...
Cost of cable TV service

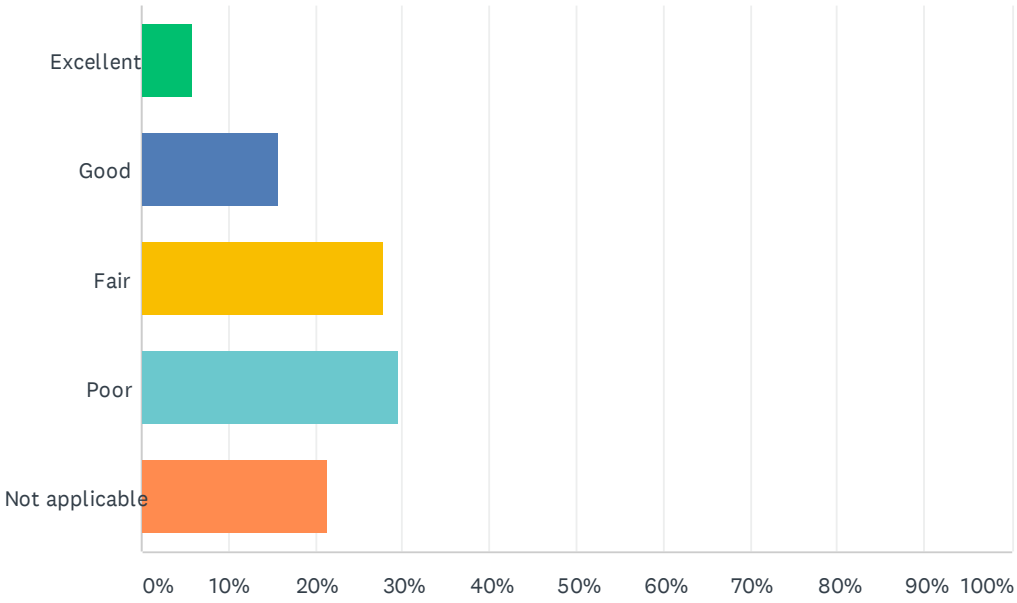

Accuracy of monthly bill
Quality of the picture
Quality of the sound
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Very Satisfied
Satisfied
Dissatisfied
Very Dissatisfied
N/A

	VERY SATISFIED	SATISFIED	DISSATISFIED	VERY DISSATISFIED	N/A	TOTAL	WEIGHTED AVERAGE
Ability to contact by phone	7.65% 13	19.41% 33	15.88% 27	22.35% 38	34.71% 59	170	2.81
Time on hold when contacting by phone	7.74% 13	14.29% 24	25.60% 43	22.02% 37	30.36% 51	168	2.89
Time spent trying to resolve the issue	5.33% 9	15.98% 27	22.49% 38	26.04% 44	30.18% 51	169	2.99
Response to service requests	8.88% 15	26.04% 44	14.20% 24	16.57% 28	34.32% 58	169	2.59
Resolution of cable system outages	7.78% 13	28.74% 48	13.77% 23	15.57% 26	34.13% 57	167	2.56
Effectiveness of Customer Service personnel	8.33% 14	27.38% 46	17.86% 30	16.07% 27	30.36% 51	168	2.60
Performance of service technicians	17.86% 30	27.98% 47	5.36% 9	6.55% 11	42.26% 71	168	2.01
Cost of cable TV service	0.58% 1	4.09% 7	21.05% 36	47.95% 82	26.32% 45	171	3.58
Accuracy of monthly bill	8.33% 14	39.88% 67	8.93% 15	10.12% 17	32.74% 55	168	2.31
Quality of the picture	12.94% 22	40.00% 68	8.24% 14	4.12% 7	34.71% 59	170	2.05
Quality of the sound	11.18% 19	42.35% 72	5.88% 10	5.88% 10	34.71% 59	170	2.10

#	OTHER (PLEASE SPECIFY)	DATE
1	insufficient channel lineup options	9/24/2020 10:27 AM
2	I swear the sound is out of synch with the visual. I am tired of the cable going out all the time.	9/24/2020 5:42 AM
3	Huge problems cancelling service. They basically told me I owed for a month after I cancelled and even after I negotiated a partial payment under protest just to get the, and their collection agency off my back, over a year later they are still hounding me. I would never deal with them again.	9/23/2020 11:34 PM
4	Have watch every bill due to sneak increases all the time. Picture, sound, service in general often goes blank.	9/23/2020 11:00 AM
5	Horrendous customer service - long wait times on phone, no response at all after storms, customer service argues about whether you need a technician and threatens to make you pay more	9/22/2020 4:10 PM
6	Reliability	9/22/2020 3:51 PM
7	My cable periodically freezes and I can't change channels, watch my DVR, or do anything	9/14/2020 8:44 PM
8	It is nearly impossible to get to get past the computer to an agent. The cost of a single service, like internet only is much, much too high.	9/14/2020 7:52 AM
9	I honestly don't even know why I pay for the cable tv part. We sure as hell don't use it.	9/11/2020 10:17 AM
10	service unreliable, cuts off	8/5/2020 7:19 PM
11	Constantly, intermittantly cuts out.	8/3/2020 11:32 AM
12	It's been more than 1 year since we dumped Comcast TV - we have only internet, now, and that's problematic enough for us.	8/1/2020 10:41 AM
13	I want to reiterate the cost issue - Comcast service is MUCH TOO EXPENSIVE. I feel ripped off with no viable alternative.	8/1/2020 9:25 AM
14	Billing was increased 70% without prior notification for the same service. This should be unacceptable practice.	8/1/2020 4:59 AM
15	Inability to get Comcast to resolve a termination billing issue	7/31/2020 10:05 PM
16	I tell everyone...overall Comcast service is good. Calling 1-800-COMCAST is a #$&*##$& nightmare. Fortunately, the service is good enough that you only need to call to threaten them with cancelling service every couple of years so they will adjust pricing.	7/31/2020 7:39 PM
17	Internet goes down a lot. Slower speed than promised.	7/31/2020 11:20 AM
18	often tiles	7/31/2020 10:18 AM
19	I don’t have cable TV	7/31/2020 9:23 AM

Q9 What is your overall opinion of the cable TV service provided by Comcast?

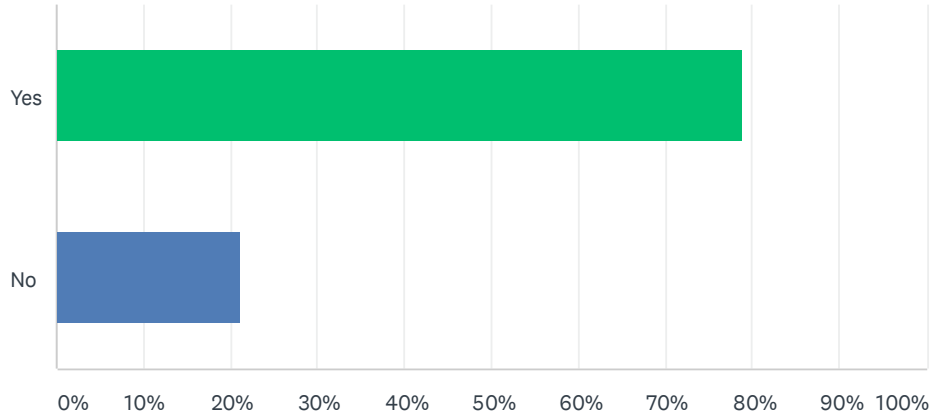
Answered: 173 Skipped: 4



ANSWER CHOICES	RESPONSES	
Excellent	5.78%	10
Good	15.61%	27
Fair	27.75%	48
Poor	29.48%	51
Not applicable	21.39%	37
TOTAL		173

Q10 Do you currently subscribe to Comcast's internet service?

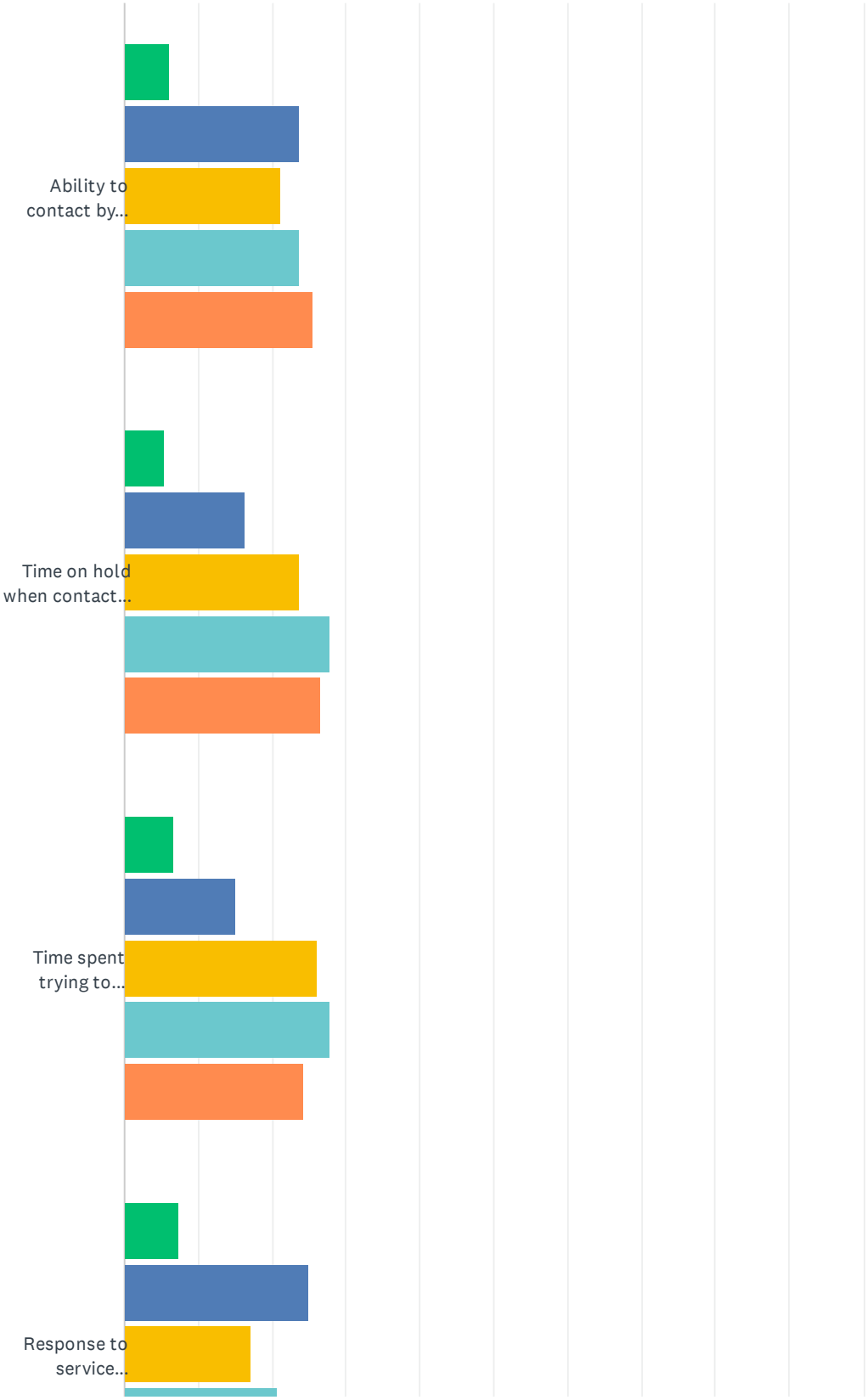
Answered: 166 Skipped: 11

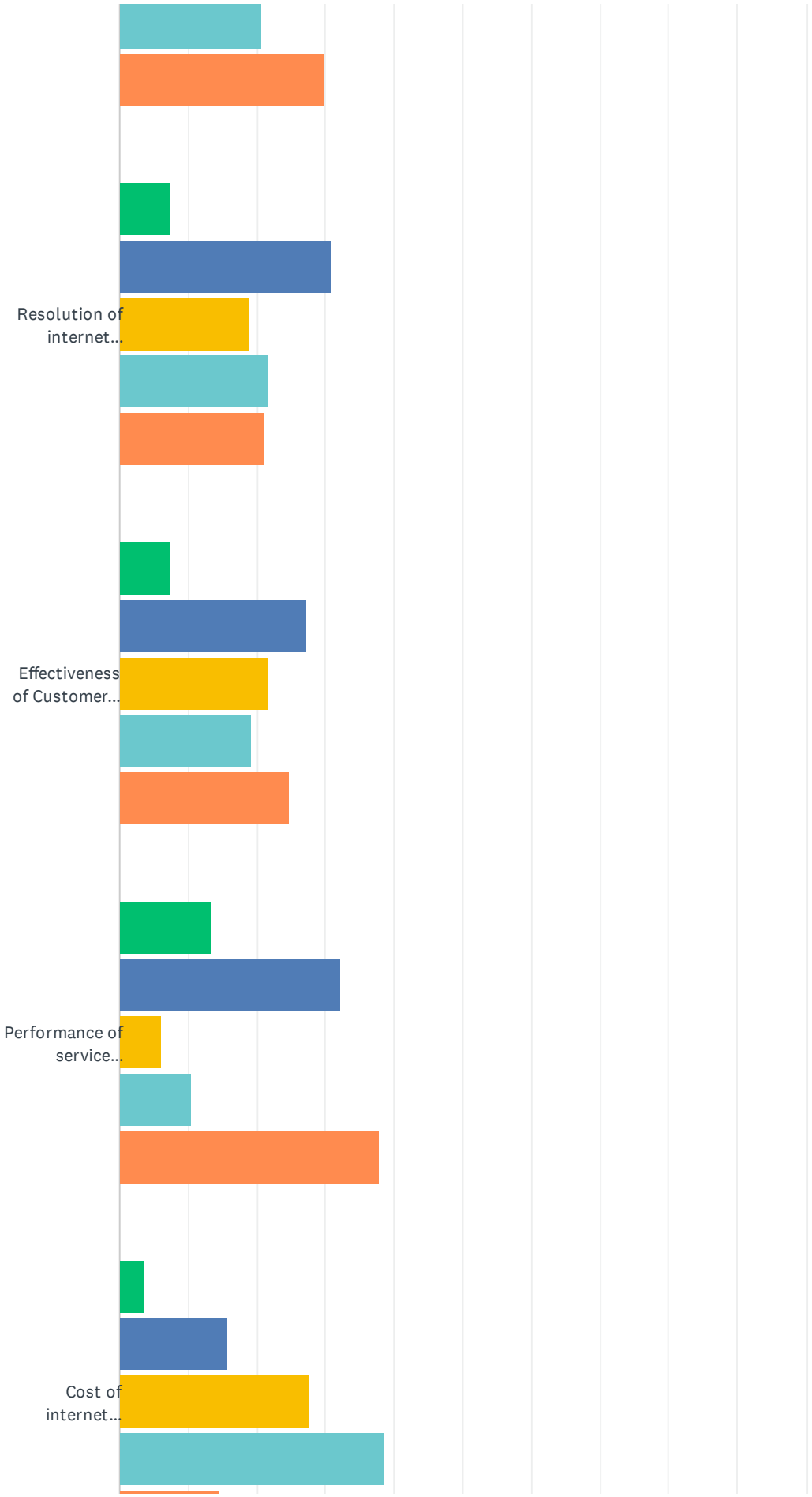


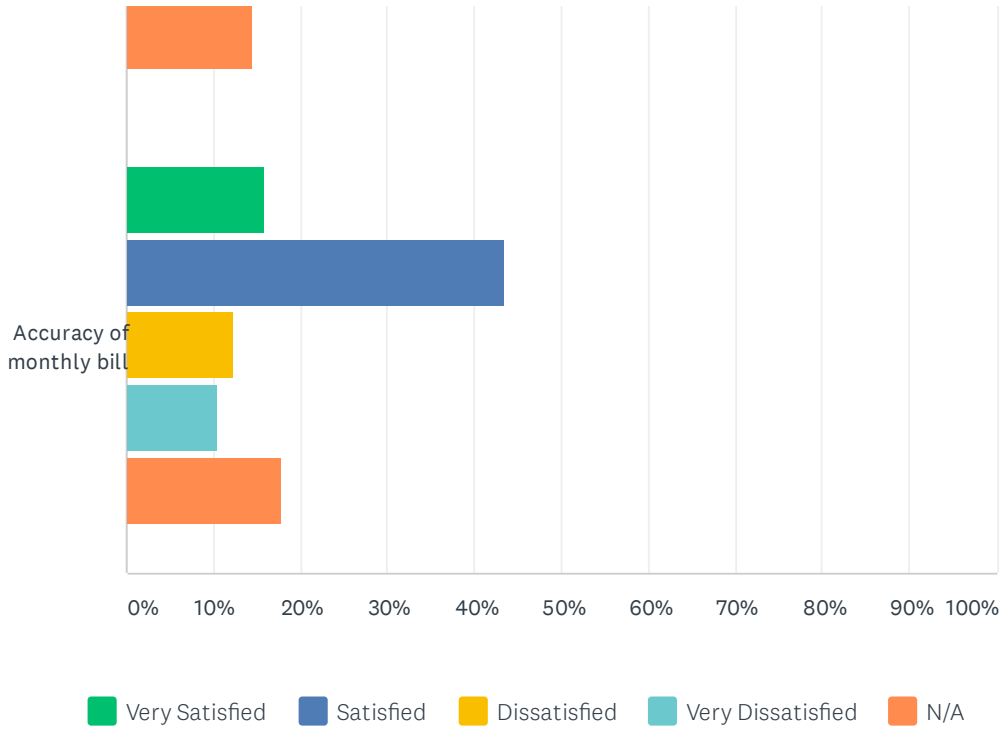
ANSWER CHOICES	RESPONSES	
Yes	78.92%	131
No	21.08%	35
TOTAL		166

Q11 For each of the following, how satisfied have you been with Comcast's internet service over the last year?

Answered: 167 Skipped: 10




Resolution of internet...
Effectiveness of Customer...
Performance of service...
Cost of internet...

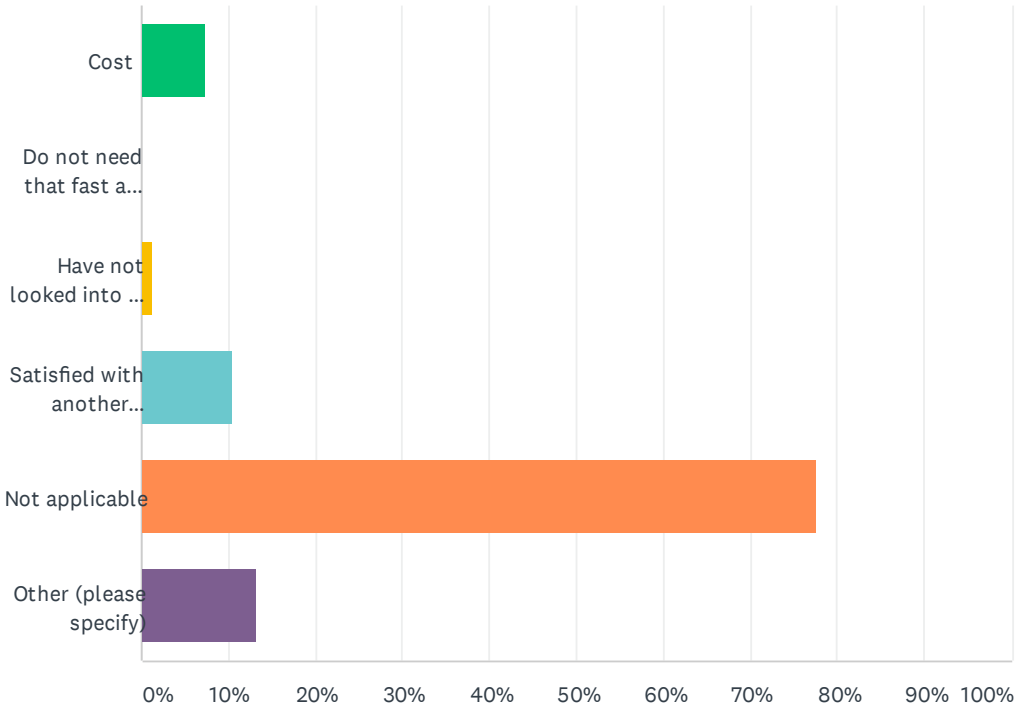


	VERY SATISFIED	SATISFIED	DISSATISFIED	VERY DISSATISFIED	N/A	TOTAL	WEIGHTED AVERAGE
Ability to contact by phone	6.06% 10	23.64% 39	21.21% 35	23.64% 39	25.45% 42	165	2.84
Time on hold when contacting by phone	5.45% 9	16.36% 27	23.64% 39	27.88% 46	26.67% 44	165	3.01
Time spent trying to resolve the issue	6.67% 11	15.15% 25	26.06% 43	27.88% 46	24.24% 40	165	2.99
Response to service requests	7.32% 12	25.00% 41	17.07% 28	20.73% 34	29.88% 49	164	2.73
Resolution of internet outages	7.27% 12	30.91% 51	18.79% 31	21.82% 36	21.21% 35	165	2.70
Effectiveness of Customer Service personnel	7.23% 12	27.11% 45	21.69% 36	19.28% 32	24.70% 41	166	2.70
Performance of service technicians	13.41% 22	32.32% 53	6.10% 10	10.37% 17	37.80% 62	164	2.22
Cost of internet service	3.61% 6	15.66% 26	27.71% 46	38.55% 64	14.46% 24	166	3.18
Accuracy of monthly bill	15.95% 26	43.56% 71	12.27% 20	10.43% 17	17.79% 29	163	2.21

#	OTHER (PLEASE SPECIFY)	DATE
1	Monthly Usage Caps are outdated and costly to the consumer	9/26/2020 8:11 AM
2	I don't use Comcast internet service.	9/25/2020 9:56 AM
3	As an overarching point I would never contact Comcast for resolution of a service problem. Their scripted responses are generalized, they don't listen, but provide a response irrelevant to to the question. Moving to a higher level knowledge base is excruciating. They do provide online suggestions which are more often helpful than talking to a person.	9/25/2020 8:48 AM
4	Would like high speed internet without having to purchase triple play package (we do not use the phone provided).	9/25/2020 8:47 AM
5	need option for separate phone modem, at no charge.	9/24/2020 10:29 AM
6	At the Farm Business Park, we have PUD fiber optics and use iFiber. We live on our Boat at Winslow Wharf Marina. We do not know who the internet provider is for our WiFi.	9/24/2020 8:40 AM
7	I dropped Comcast for internet after having trouble dealing with them on service.	9/23/2020 11:37 PM
8	Monthly bill often increases even though I'm under contract	9/23/2020 11:01 AM
9	Not happy about utilization caps. Get rid of them.	9/14/2020 5:00 PM
10	would like to buy internet service only but it is way to expensive compared to what you can get in Seattle.	9/14/2020 7:54 AM
11	I cannot stress enough how poor comcast's internet offerings are on this island. I would pay 10000$ right now to have fiber through NOT comcast without even questioning it.	9/11/2020 10:18 AM
12	costs are userous	8/9/2020 11:58 AM
13	really would like high speed service that does not go off	8/5/2020 7:21 PM
14	We have had technicians out here multiple times and we still have issues pretty much daily with out internet.	8/4/2020 1:28 PM
15	Constantly, intermittant service cuts out; a few minutes here, a few there, but very disruptive.	8/3/2020 11:34 AM
16	In today's climate (with workers/students having to access their space remotely because of Covid-19), it is important that Comcast assist with allowing increased use of this service with no/low cost.	8/2/2020 11:58 AM
17	Comcast has too many unannounced maintenance outages that occur mid-day. Comcast support is too uninformed, too foreign (affects communication), and too quick to blame our modem, router, etc., for Comcast's issues. This wastes time/energy, and creates stress, not to mention interrupted internet is inexcusable - internet has a become a basic utility, like electricity and water service, to allow that to happen haphazardly on Comcast's timetable.	8/1/2020 10:44 AM
18	The cost of internet service is outrageous, when the KPUD can offer gig service for $90 without a contract. The same service be over $500 from Comcast.	8/1/2020 10:28 AM
19	The 1TB cap is absurd and extortionate. To claim that network density is a problem when KPUD's backbone provides the majority of the infrastructure is insulting to us as consumers.	8/1/2020 12:20 AM
20	Many outages constantly without warning	7/31/2020 9:04 PM
21	We frequently have to call Comcast automated service to remotely reset our modem Because of no internet access	7/31/2020 9:28 AM

Q12 For what reasons do you not currently subscribe to Comcast's internet service? Mark all that apply.

Answered: 152 Skipped: 25

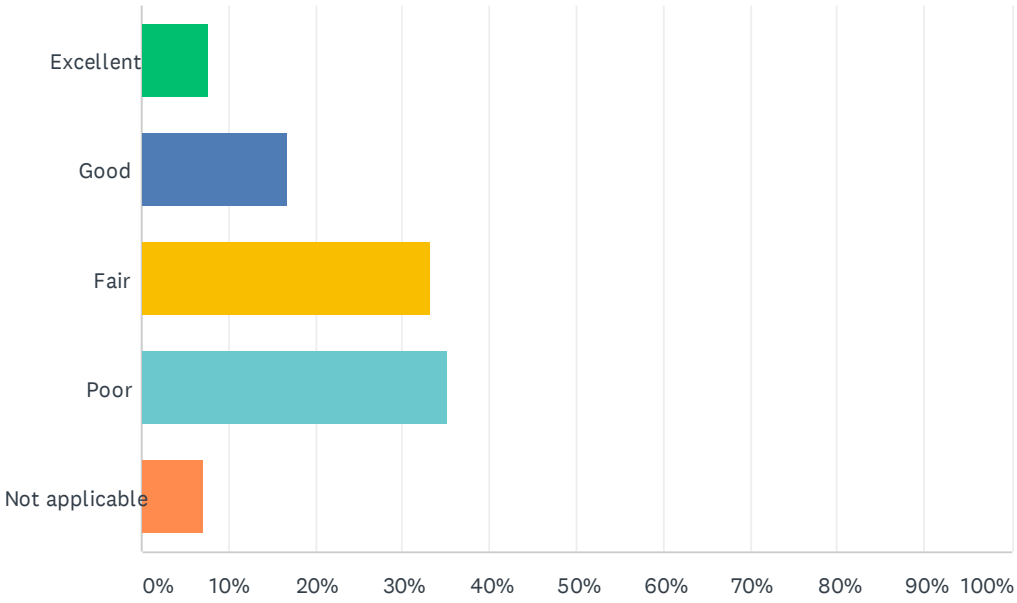


ANSWER CHOICES	RESPONSES	
Cost	7.24%	11
Do not need that fast a speed for internet service	0.00%	0
Have not looked into the specifics of subscribing	1.32%	2
Satisfied with another Internet Service Provider	10.53%	16
Not applicable	77.63%	118
Other (please specify)	13.16%	20
Total Respondents: 152		

#	OTHER (PLEASE SPECIFY)	DATE
1	Use iFiber at work, no Comcast hookups, WiFi at marina provided by management	9/24/2020 8:40 AM
2	Need matching download + upload speeds	9/24/2020 6:15 AM
3	Bad experience with them in the past. Now with Century Link, which is marginally better. Really want KPUD fiber optic cable service.	9/23/2020 11:37 PM
4	Service is not available at my address	9/22/2020 10:17 PM
5	They don't offer coverage to our addresss!	9/22/2020 2:06 PM
6	They are a monopoly.	9/14/2020 10:22 AM
7	Not satisfied with reliability of Comcast cable service.	9/11/2020 11:19 AM
8	They won’t serve our house because they said our driveway is too long.	9/1/2020 9:18 PM
9	Need to add bandwidth and latency	8/2/2020 6:13 PM
10	Not available at our home and Comcast won’t build one	8/1/2020 11:58 AM
11	We do not have Comcast in JustA Meer and cost for installation has been quited to exceed #20,0000	8/1/2020 10:46 AM
12	Want to stay as far away as possible from Comcast	7/31/2020 10:06 PM
13	Comcast has poor reviews from friends and associates.	7/31/2020 9:27 PM
14	Attemped to get comcast internet but while the neighbor has comcast they seem unwilling to connect my house	7/31/2020 8:11 PM
15	I do subscribe	7/31/2020 7:46 PM
16	Not available at my address	7/31/2020 7:03 PM
17	Poor customer service, increased cost without notice or explanation	7/31/2020 6:41 PM
18	I don't want VOIP and costs don't pencil out to get land line and internet separately	7/31/2020 6:10 PM
19	Not offered	7/31/2020 5:57 PM
20	They will not service my house.	7/31/2020 8:45 AM

Q13 What is your overall opinion of Comcast as an internet service provider?

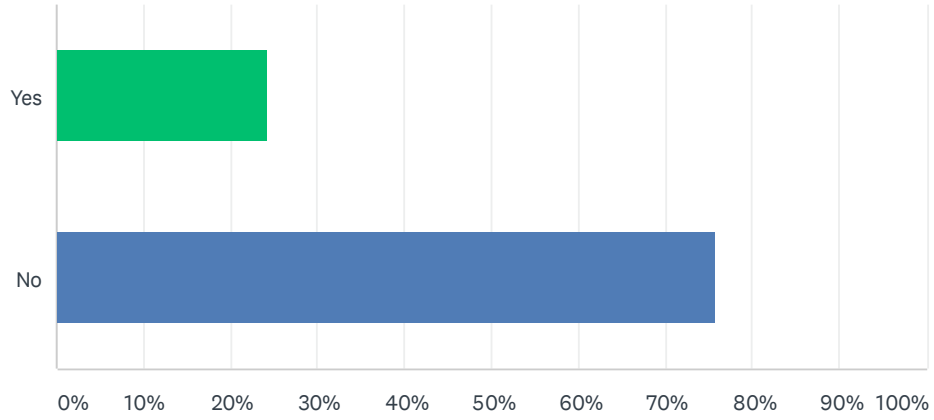
Answered: 168 Skipped: 9



ANSWER CHOICES	RESPONSES	
Excellent	7.74%	13
Good	16.67%	28
Fair	33.33%	56
Poor	35.12%	59
Not applicable	7.14%	12
TOTAL		168

Q14 Do you currently subscribe to Comcast's telephone service?

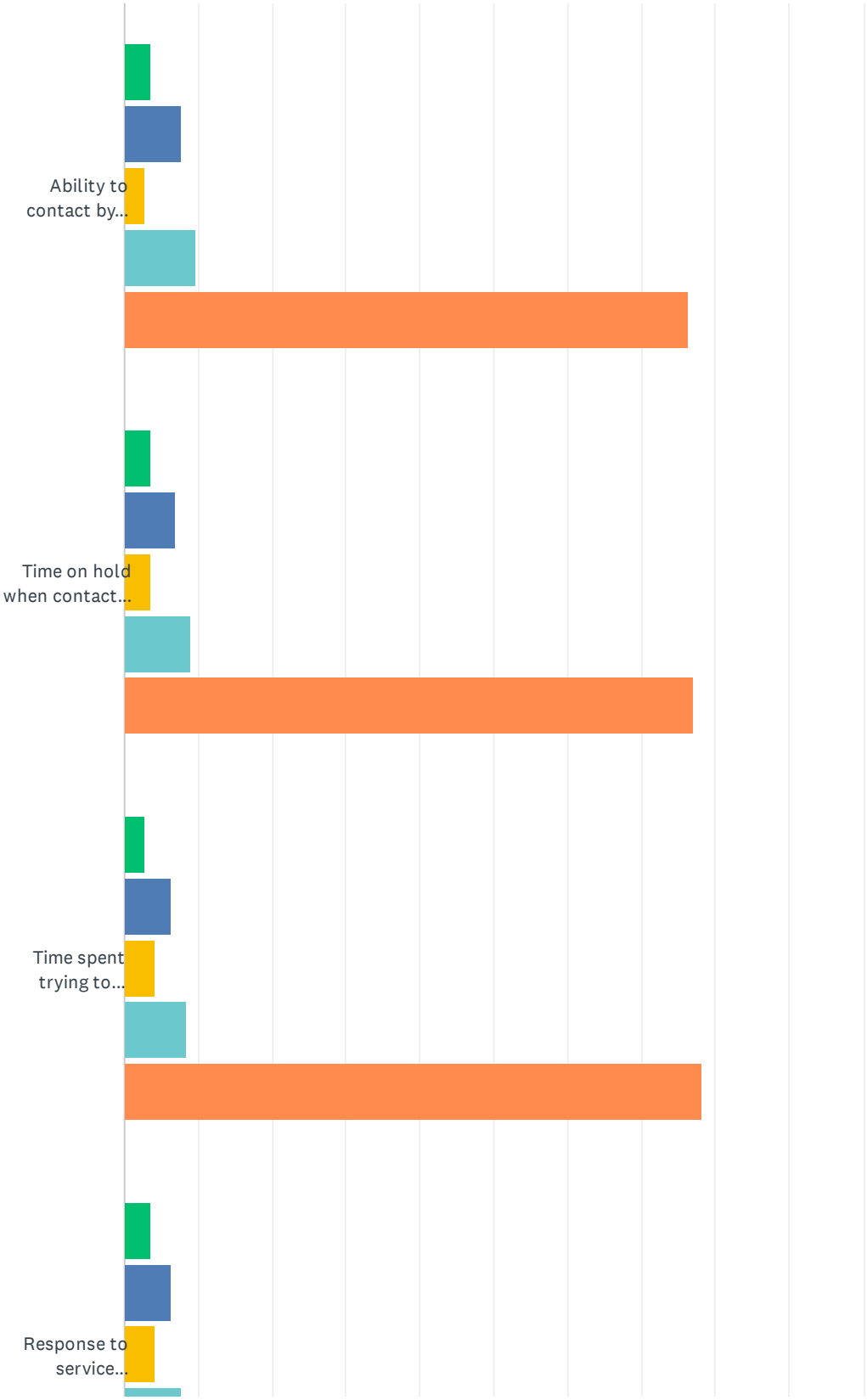
Answered: 161 Skipped: 16

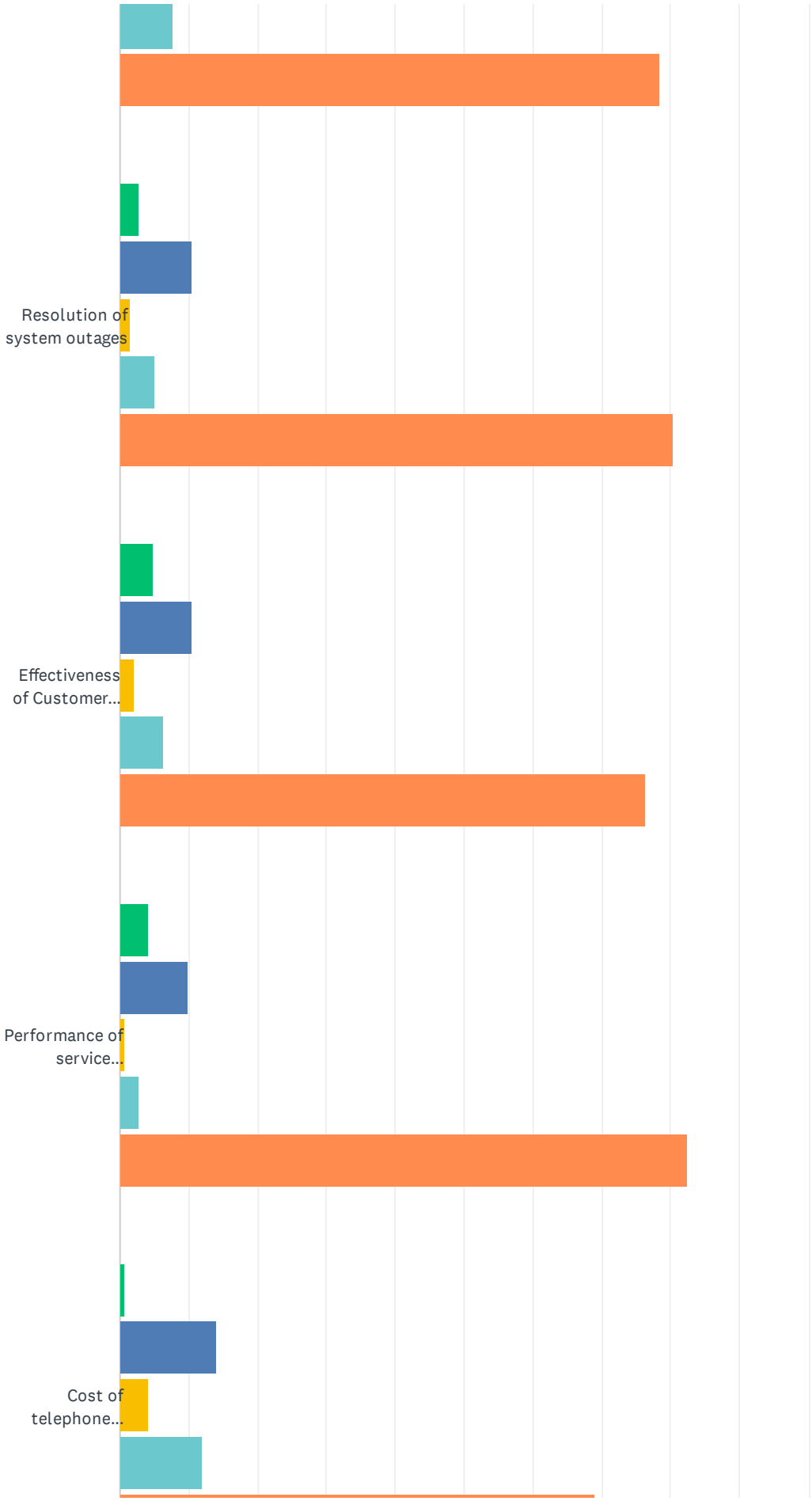


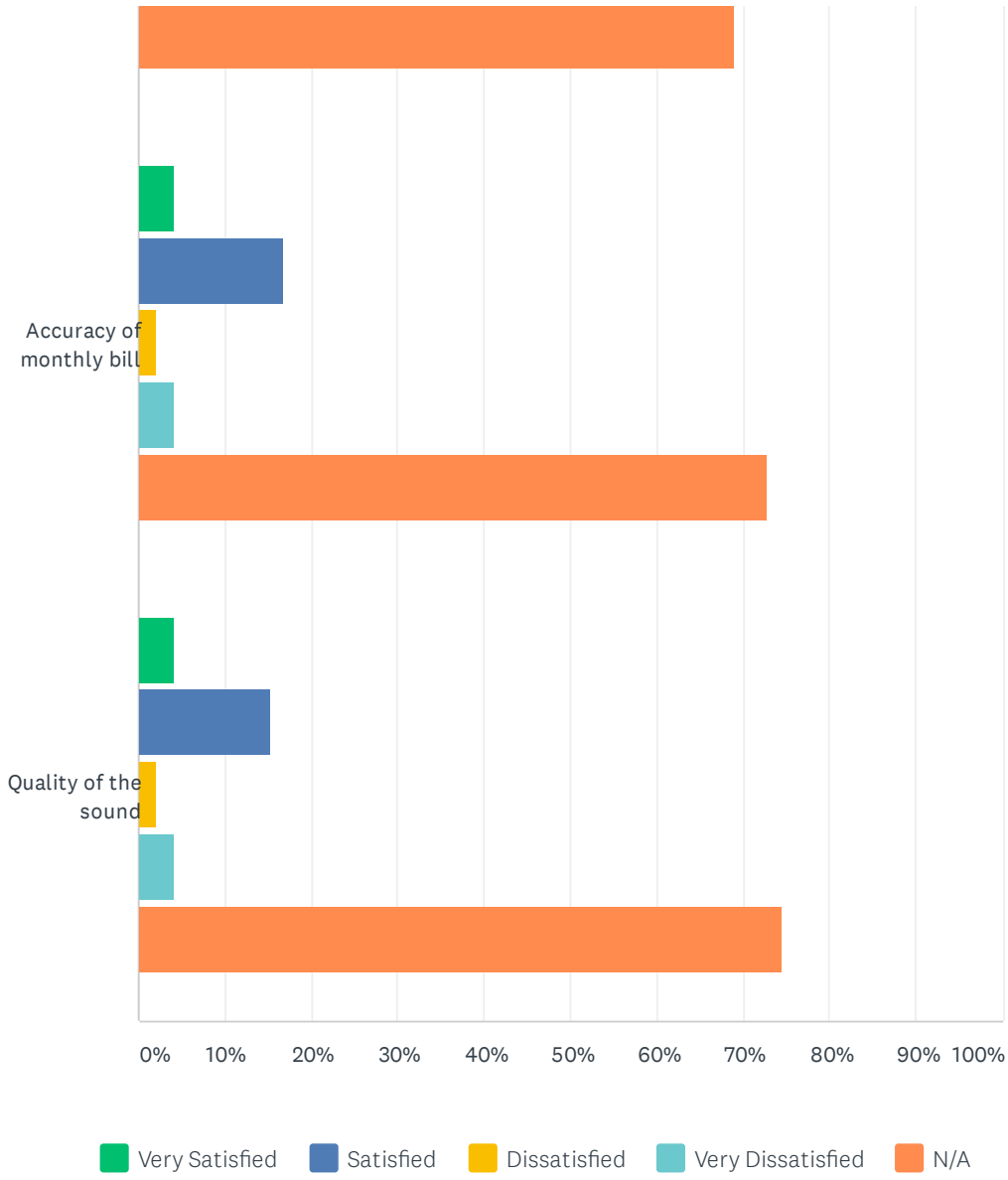
ANSWER CHOICES	RESPONSES	
Yes	24.22%	39
No	75.78%	122
TOTAL		161

Q15 For each of the following, how satisfied have you been with Comcast's telephone service over the last year?

Answered: 145 Skipped: 32




Resolution of system outages
Effectiveness of Customer...
Performance of service...
Cost of telephone...

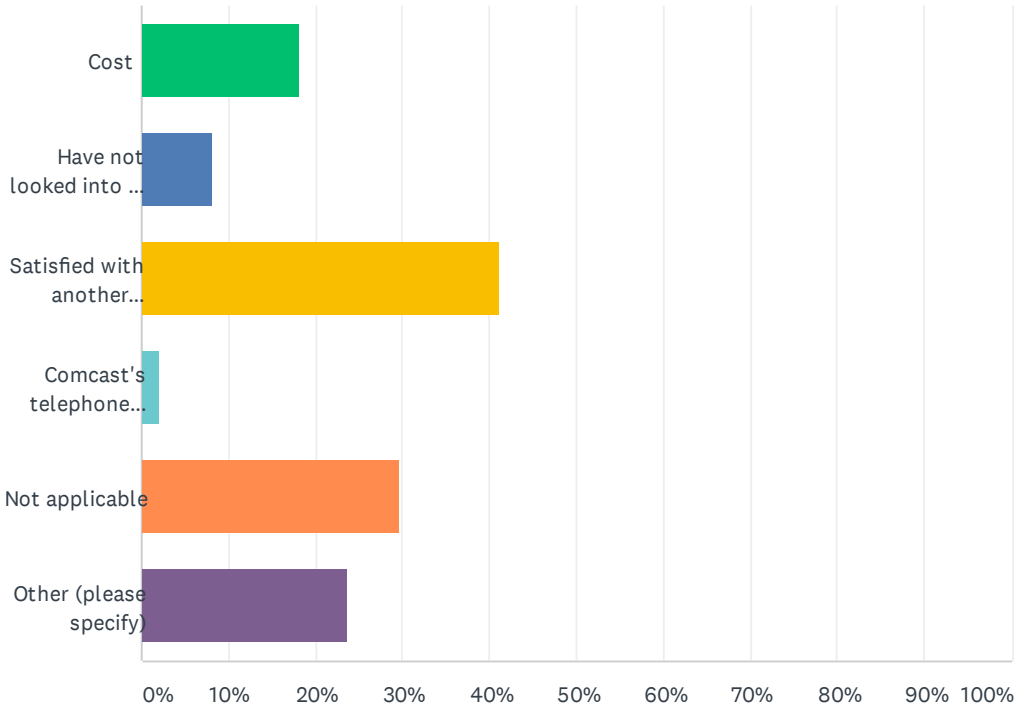

Accuracy of monthly bill
Quality of the sound
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Very Satisfied
Satisfied
Dissatisfied
Very Dissatisfied
N/A

	VERY SATISFIED	SATISFIED	DISSATISFIED	VERY DISSATISFIED	N/A	TOTAL	WEIGHTED AVERAGE
Ability to contact by phone	3.47% 5	7.64% 11	2.78% 4	9.72% 14	76.39% 110	144	2.79
Time on hold when contacting by phone	3.47% 5	6.94% 10	3.47% 5	9.03% 13	77.08% 111	144	2.79
Time spent trying to resolve the issue	2.80% 4	6.29% 9	4.20% 6	8.39% 12	78.32% 112	143	2.84
Response to service requests	3.47% 5	6.25% 9	4.17% 6	7.64% 11	78.47% 113	144	2.74
Resolution of system outages	2.82% 4	10.56% 15	1.41% 2	4.93% 7	80.28% 114	142	2.43
Effectiveness of Customer Service personnel	4.86% 7	10.42% 15	2.08% 3	6.25% 9	76.39% 110	144	2.41
Performance of service technicians	4.20% 6	9.79% 14	0.70% 1	2.80% 4	82.52% 118	143	2.12
Cost of telephone service	0.70% 1	14.08% 20	4.23% 6	11.97% 17	69.01% 98	142	2.89
Accuracy of monthly bill	4.20% 6	16.78% 24	2.10% 3	4.20% 6	72.73% 104	143	2.23
Quality of the sound	4.14% 6	15.17% 22	2.07% 3	4.14% 6	74.48% 108	145	2.24

#	OTHER (PLEASE SPECIFY)	DATE
1	I don’t even use the phone service. Just subscribed to it because it was the cheapest option for a bundle	9/25/2020 6:06 PM
2	We were forced to get phone service in order to get a reduced bill for enhanced internet. The payment packages are very confusing and often bundled together . We don't use the phone service at all, even though we "paid" for it.	9/25/2020 1:58 PM
3	I disconnected my cable connection.	9/25/2020 9:57 AM
4	We do not use this. We subscribe to phone service only because we need high speed internet, and that is only available in their triple play bundle.	9/25/2020 8:48 AM
5	Use cell phone only	9/24/2020 8:41 AM
6	Wouldn't use them as they don't provide service during outages on the island, which are common	9/18/2020 2:12 PM
7	I have been unable to use my phone for about 6 months due to noise in the line.	9/14/2020 8:47 PM
8	There is no cell service where I live and when the internet goes out, which it frequently does, I have no way to communicate with the outside world.	9/14/2020 7:55 AM
9	Intermittant service cut outs, a few minutes here, a few hours there. Very disruptive	8/3/2020 11:36 AM
10	We tried to purchase Comcast's phone service, but, after getting multiple different prices, and being told they couldn't give us a "firm" price until we purchased a compatible router, we bailed out and stuck with our other service. Comcast doesn't need our money. Seriously, the City should start its own broadband utility asap.	8/1/2020 10:48 AM
11	Our phone service is part of a bundle that we don’t use. It’s cheaper than subscribing to two services partly because we use high quality internet service.	7/31/2020 9:57 AM
12	I don’t have Comcast phone service because it is too expensive.	7/31/2020 9:29 AM

Q16 For what reasons do you not currently subscribe to Comcast's telephone service? Mark all that apply.

Answered: 148 Skipped: 29



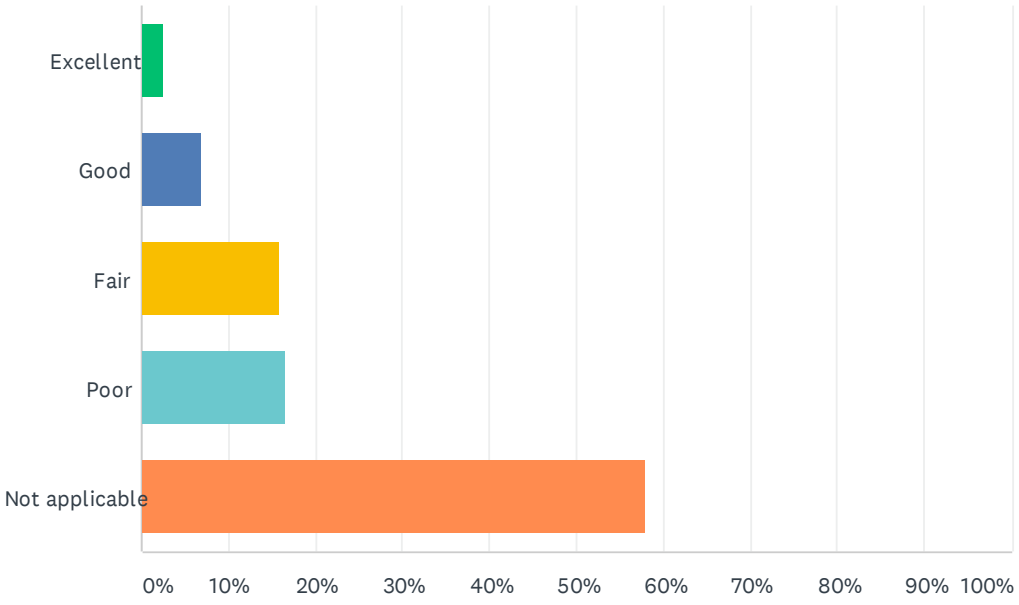
ANSWER CHOICES	RESPONSES	
Cost	18.24%	27
Have not looked into the specifics of subscribing	8.11%	12
Satisfied with another telephone service provider	41.22%	61
Comcast's telephone service is not available	2.03%	3
Not applicable	29.73%	44
Other (please specify)	23.65%	35
Total Respondents: 148		

#	OTHER (PLEASE SPECIFY)	DATE
1	I use CenturyLink, because my house has the old fashioned, traditional copper wire, analog service, which is WAY more reliable during power outages than is VOIP or other digital service	9/27/2020 6:52 PM
2	Doubtful reliability.	9/25/2020 7:34 PM
3	Have VOIP	9/25/2020 11:12 AM
4	Cell phones are more convenient and provide all the phone service I need	9/25/2020 9:27 AM
5	Only WiFi calling, not a true land line.	9/25/2020 7:07 AM
6	Use T-Mobile	9/24/2020 8:41 AM
7	Our house was wired for landline phone. Through coax phone required we leave a phone at the cable box. Not ideal.	9/24/2020 7:19 AM
8	service is unavailable when we lose power	9/23/2020 8:41 PM
9	Inadequate arrangements for seasonal hold on services.	9/22/2020 4:09 PM
10	It is Comcast	9/22/2020 3:14 PM
11	quality of service	9/18/2020 2:12 PM
12	Don't need it as I have a cell phone. The only "benefit" of having a landline is more telemarketing calls and scam calls - and that is not a benefit.	9/14/2020 5:01 PM
13	They are a monopoly.	9/14/2020 10:23 AM
14	I am forced to for internet service	9/14/2020 9:56 AM
15	No landline phone is needed	9/14/2020 9:49 AM
16	don't need it	9/14/2020 9:14 AM
17	I have a cell phone.	9/11/2020 10:29 AM
18	I have a cell phone, why would I need a less convenient phone.	9/11/2020 10:18 AM
19	Cell phone is all I need, no need for a separate line	8/7/2020 11:13 PM
20	need a hard line for elevator. comcast does not provide	8/5/2020 7:22 PM
21	Nobody has landlines anymore	8/3/2020 9:29 AM
22	Happy to use cellular service and Skype.	8/2/2020 11:59 AM
23	See comment above - we tried to get the service and were ultimately unsuccessful. Too shady, too much trouble. Easier to just let Comcast be Comcast, without us.	8/1/2020 10:48 AM
24	wifi calling from cell service provider	8/1/2020 8:51 AM
25	Don’t need a land line	8/1/2020 8:50 AM
26	No need	8/1/2020 7:57 AM
27	No need for landline.	7/31/2020 10:52 PM
28	Bundle	7/31/2020 9:05 PM
29	Don’t need a land line	7/31/2020 8:03 PM
30	I don't have a landline, satisfied with my mobile service provider	7/31/2020 6:42 PM
31	Don’t use a landline	7/31/2020 6:40 PM
32	Used to have Comcast phone, but sound quality to awful to have a conversation on the phone. Radio station interference	7/31/2020 6:28 PM
33	I don't like VOIP because it doesn't work when the power goes out.	7/31/2020 6:11 PM
34	We use T-mobile over the internet when at home. Have Century Link for land line as a backup.	7/31/2020 9:57 AM

35	Use cell phone	7/31/2020 8:55 AM

Q17 What is your overall opinion of Comcast as a telephone service provider?

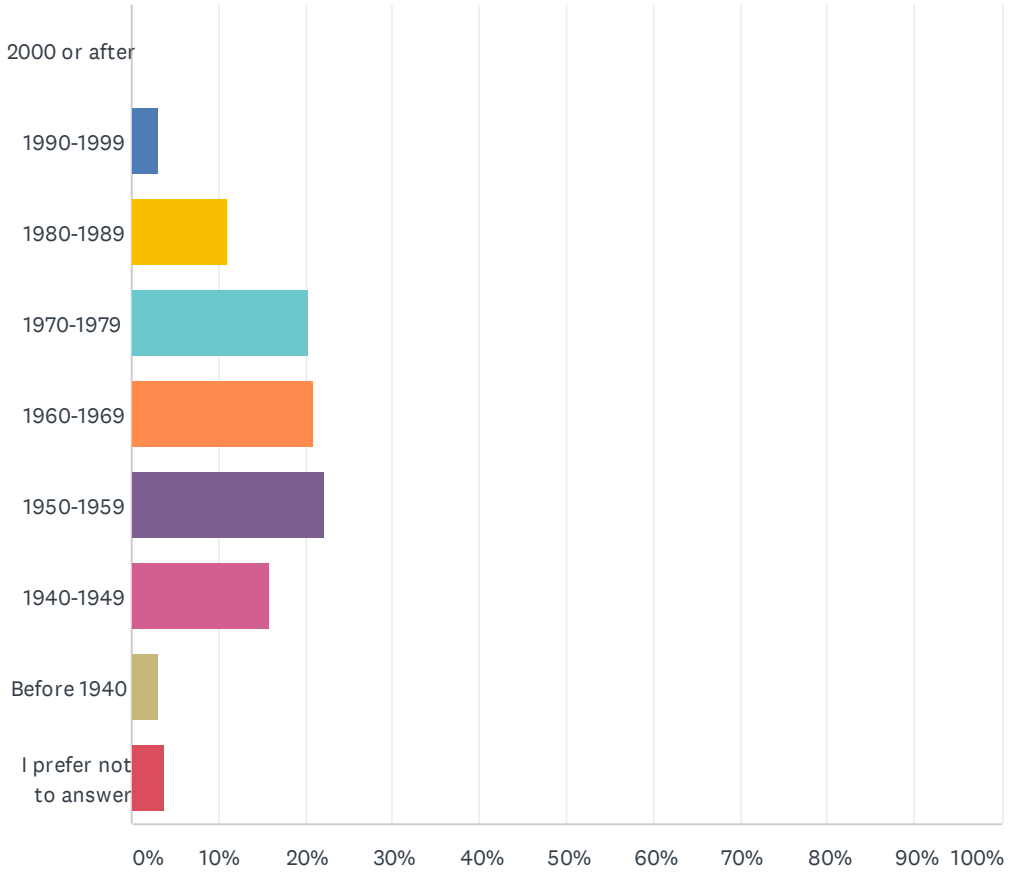
Answered: 157 Skipped: 20



ANSWER CHOICES	RESPONSES	
Excellent	2.55%	4
Good	7.01%	11
Fair	15.92%	25
Poor	16.56%	26
Not applicable	57.96%	91
TOTAL		157

Q18 When were you born?

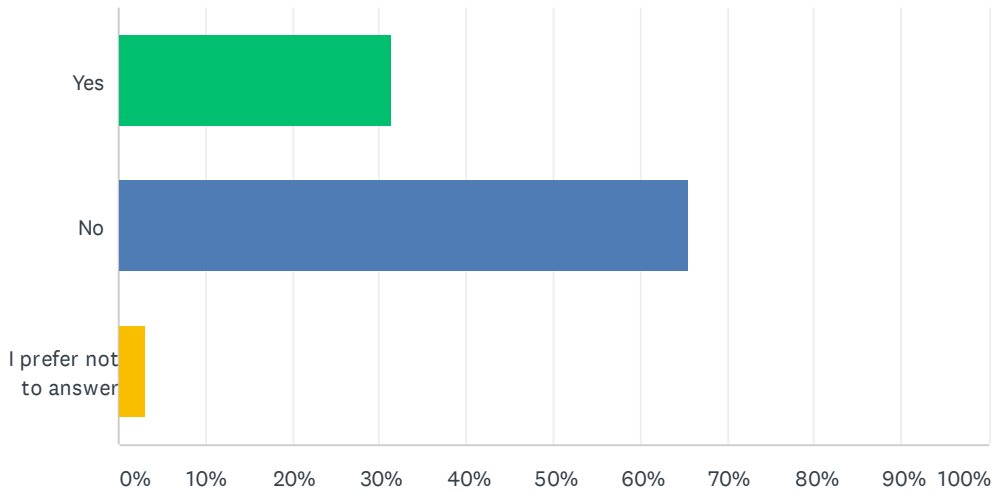
Answered: 163 Skipped: 14



ANSWER CHOICES	RESPONSES	
2000 or after	0.00%	0
1990-1999	3.07%	5
1980-1989	11.04%	18
1970-1979	20.25%	33
1960-1969	20.86%	34
1950-1959	22.09%	36
1940-1949	15.95%	26
Before 1940	3.07%	5
I prefer not to answer	3.68%	6
TOTAL		163

Q19 Do you currently have children under age 18 in your household?

Answered: 162 Skipped: 15



ANSWER CHOICES	RESPONSES	
Yes	31.48%	51
No	65.43%	106
I prefer not to answer	3.09%	5
TOTAL		162

Q20 Please provide any other comments you may have regarding the cable TV, internet, or telephone services you receive from Comcast.

Answered: 96 Skipped: 81

#	RESPONSES	DATE
1	Internet speeds are not what I'm paying for.	9/30/2020 7:28 AM
2	Unethical practices by both corporate employees and its contractors; Never follows-through on its promises; Out-n-out LIES; ALWAYS makes the customer be the fault - NEVER accepts accountability for its actions; Frequent billing errors, which take forever to resolve - and for which the customer has to fight like h-e-double-hockey-sticks; and the same applies to technical issues; constantly changes its story and answers to customer questions; lies - a TON!!!; I feel trapped - satellite isn't reliable enough, and Comcast/Xfinity is horrible... and there are no other options.	9/27/2020 6:56 PM
3	no choise	9/26/2020 4:58 PM
4	Comcast seems stuck in 1990s with clunky equipment, minimal channel offerings, internet caps and intro pricing that balloons after 12/24 months.	9/26/2020 8:16 AM
5	Comcast has the services that my household desires: HD, whole house DVR, the channels we want. My only complaints are that the equipment is not reliable and the company does not proactively tell customers that their equipment could be upgraded. The cost is also a lot but that's a consequence of cable network contracts.	9/25/2020 6:10 PM
6	Pricing is very confusing. We have to call in every year in order to prevent our bill from going up. Prices are in bundles instead of a fixed price for each service at a fair level for all users. New subscribers get better rates but those who have been loyal to Comcast get very little advantage if any. we stick with them because we want cable internet which is more reliable.	9/25/2020 2:01 PM
7	Comcast/Xfinity provides cell service via TMobile, City might want to include cellular service/tower in current negotiations.	9/25/2020 11:13 AM
8	I only use Comcast to get basic cable.	9/25/2020 9:59 AM
9	Need competition on the island. Need fiber options. Comcast is too expensive.	9/25/2020 9:30 AM
10	The ISP service, I believe is competitively priced. It is about average price for the speed delivered. The TV cable service is ridiculous. And Comcast policy of raising prices, until you threaten to leave, should be banned. They are notorious for lowering prices if you just complain. They should have a standard beat rate for everyone, not a rate for whatever the traffic will bear.	9/25/2020 8:59 AM
11	Most common problem is frequency of outages. some are related to power outages. But many do not appear to have a cause. It just stops working.	9/25/2020 8:20 AM
12	I reside at Harbor Square. Our Board made the decision to drop Comcast in favor of Mereo Networks high speed Wi-Fi because Comcast continued to raise prices without providing additional services justifying the higher cost.	9/25/2020 8:06 AM
13	It is too expensive and billing is very obscure. I do not think Comcast should have a monopoly on internet service unless you are lucky enough to be in a kpud fiber optic area. I'd like to see our community transition to fiber optic, and for companies like Comcast compete for customers.	9/25/2020 8:04 AM
14	would like to see them move to fiber versus coax cable.	9/24/2020 10:33 AM
15	The city needs to support other internet/tv options. Comcast has a monopoly on the island, their rates are high and their internet drops all the time but we have to pay whatever they charge. I dont think the city should have an agreement with any one service provider- especially when the service is only so-so.	9/24/2020 10:08 AM
16	We decided to stop cable TV services through Comcast and switched to antenna and streaming. Haggling for better prices every year, changing boxes every year depending on the latest promotional package, cost creep throughout the year, and having channels move into other more expensive packages throughout the year was unacceptable. We still receive internet, but I would love to see the City invest in the County fiber optic program to give us options. Internet is a necessity now. It should be run like a utility.	9/24/2020 7:22 AM
17	Comcast's monopoly over cable services has been detrimental to general competition in the market. The company has abused this monopoly across the country, and would rather stifle competition than improve and expand their services.	9/24/2020 6:17 AM

18	Frankly, I detest this company.	9/23/2020 11:38 PM
19	Comcast is VERY expensive and service is inconsistent. We have brief service interruptions, it's very difficult to reach a live person. The menu options don't apply and you get bounced from menu to menu. In addition, they remove programming that was included in my subscription. To get the programming back they require another subscription. By bill is already over 200.00/per month, which is outrageous.	9/23/2020 8:44 PM
20	I would choose almost anyone and anything else than have to deal with Comcast! They are a dismal service provider.	9/23/2020 3:34 PM
21	I would prefer to pick my programming and have the fastest internet speeds available	9/23/2020 1:36 PM
22	It is insane how I need to check ever monthly bill and spend hours of my time on the phone with customer service due to secretly sliding in increases into my bill despite being in contract with Comcast. No bill can be trusted from them and the cost is far higher than other servers.	9/23/2020 11:05 AM
23	Extremely bad service	9/22/2020 9:33 PM
24	TV is seriously overpriced compared to many other locales, in state, out of state, ...	9/22/2020 4:13 PM
25	I recently discontinued cable TV and phone services because of cost and difficulty dealing with Comcast.	9/22/2020 4:10 PM
26	Reliability of service is horrible.Willingness to fix it is non-exsistant.	9/22/2020 3:57 PM
27	internet is SO much faster and cheaper than century link and that is why we had to have it	9/22/2020 3:42 PM
28	Internet is slow and expensive. I did my degree in the Netherlands and it feels like the internet here is three times slower and much more unreliable.	9/22/2020 3:15 PM
29	We are building a home and have learned that Comcast will not provide internet service. They won't even consider doing it, even if we paid to extend their line. Our neighbors to the north of the lot have coverage but the neighbors to the south do not have internet coverage. It's very disappointing, Comcast told me they reviewed my address and decided "cost share to extend coverage was not an option and that they aren't considering bringing internet down the rest of our street in the future." I am frustrated that they are our only high speed option on the island and they won't provide with service, even if we paid. For reference, we are building on Bucsit Lane NE, 9500 Bucsit Lane has internet, whereas, 9491 Bucsit Lane does not have coverage.	9/22/2020 2:12 PM
30	Please do not let comcast be the franchise, at least open up for bidding on the island there is no competition because of franchise agreements it hurts consumers and creats a defacto monopoly.	9/18/2020 2:57 PM
31	This city badly needs competition for broadband services. Comcast has a monopoly for decent broadband on the island, and as a result, they charge exorbitant fees for poor service. No one should be forced to purchase crummy cable packages just to received decent broadband.	9/15/2020 9:22 PM
32	The website is maddingly frustrating to use. For email accounts it does not seem able to differentiate among different members of the household when it comes to things such as logging in and changing passwords.	9/15/2020 1:45 PM
33	ROW fees should be used to improve ROW space for transportation, not go to another fund.	9/14/2020 11:44 PM
34	surprisingly happy with all products and service	9/14/2020 11:20 PM
35	Trying to deal with problems is very difficult. It's very time consuming and the problem is only resolved about 50% of the time.	9/14/2020 8:48 PM
36	Can we get KPUD service? Some competition?	9/14/2020 6:34 PM
37	Rates are constantly going up unless you call and argue	9/14/2020 5:44 PM
38	Constantly losing internet....so aggravating when trying to work from home.	9/14/2020 3:02 PM
39	Very unreliable service. Sunject to frequent outages	9/14/2020 10:54 AM
40	They are awful in every way. There should be free and open competition for these services from a variety of providers.	9/14/2020 10:24 AM
41	Overpriced utility	9/14/2020 10:04 AM

42	we should be a city that provides our own internet service and do it faster and better than Comcast	9/14/2020 9:56 AM
43	I cannot say how much I hate Comcast. I recently switched from Comcast to CenturyLink. I now pay $10/mo more for internet, and I am willing to pay this because I hate Comcast so much. I will never give them another penny of my money. The way they switch the price every time the contract runs out to some insane huge amount, then expect the customer to play the game of calling and fighting for a better rate is horrible. Bainbridge needs a better option for internet than Comcast or Centurylink.	9/14/2020 9:36 AM
44	I wish we had other options but Comcast seems to be the best of what is available on the island	9/14/2020 9:14 AM
45	Overall we have a positive opinion of Concast - we were forced to get DirectTv due to rising over the top costs of Comcast	9/14/2020 9:09 AM
46	I would love to see some competitiion for service on the island. If that isn't possible, I'd like to see a different service provider get the island's business.	9/14/2020 7:57 AM
47	I wish there were more high quality providers on the island.	9/11/2020 10:30 AM
48	I currently live in Winslow and have access to Comcast internet. However, we are looking to move to another part of the island and we've been disappointed to learn a good amount of areas don't get high speed internet. I have called Comcast to find out if they would extend coverage to these areas and the customer service representatives have never resolved this issue. I have friends with this problem too and they said Comcast wanted to charge them $20,000 to run the cables to their home. It seems like if they get a special deal with the city, and have a monopoly on high speed internet, they should cover our entire island.	9/8/2020 7:23 PM
49	Our household is unable to get reliable internet service because Comcast will not serve our house and centurylink is DSL and horrible. We have three high school students and they will not be able to do online school from our house. We live in Fort Ward. That is unacceptable.	9/1/2020 9:22 PM
50	cost is usurous and needs to come down. Comcast is a monopoly and there needs to be competition.	8/9/2020 12:00 PM
51	I believe we should have a underground direct connection high speed service. That will remain uninterrupted. Most people would agree. Willing to pay for such a service. When can I have it?	8/5/2020 7:24 PM
52	With school going online in the fall, I have some serious doubts whether we can have 4 people working from home on our current service. It is slow, turns off unexpectedly and is just generally frustrating.	8/4/2020 1:30 PM
53	Their service has become increasingly inconsistant and intermittant	8/3/2020 11:37 AM
54	Comcast is the worst. Literally anyone else is better	8/3/2020 9:29 AM
55	Comcast could upgrade infrastructure to prevent frequent outages.	8/2/2020 6:14 PM
56	Comcast is the only "player" on the Island (Century Link offers similar service, but is not as reliable as Comcast), and we need, and could benefit from, a similar company/provider available on the Island so that customers may access better service/competitive pricing.	8/2/2020 12:05 PM
57	I live in central winslow and service interruptions and downed modem is frequent and needs to be resolved	8/1/2020 11:46 PM
58	We want more options than just comcast	8/1/2020 9:48 PM
59	The customer service is horrible. You wait a long time then when you do get to talk to someone you get hung up on. We have been trying to get our inernet fixed fortwo months and no one has come out yet. They say they dont have any time until September. I recommend do not use Comcast.	8/1/2020 8:03 PM
60	way too expensive for poor reliability and performance	8/1/2020 1:09 PM
61	They won’t build a line to our home (though it’s available on our street). We can only get CenturyLink but the speeds offered aren’t enough to check email, much less stream at 1.5mbps.	8/1/2020 12:00 PM
62	The sooner Comcast is replaced by local broadband internet, the better for us, but we have no illusions that will occur.	8/1/2020 10:49 AM

63	I recently found out that Comcast has data limits for internet usage, I could not believe this. In 2020 when streaming, gaming and heavy internet usage is the NORM having data caps for home internet is disgusting behavior from a multibillion dollar corporation, as they have shown during this pandemic that internet providers can suspend data caps without any negatives for them	8/1/2020 10:34 AM
64	I would like to have another option for high speed (gigabit+)	8/1/2020 10:28 AM
65	Comcast services are TOO COSTLY! I feel ripped off. I especially hate their TV commercials that attempt to portray them as a helpful, warm and fuzzy corporation. What a joke.	8/1/2020 9:29 AM
66	COBI should drop Comcast and co-invest in fiber optic internet	8/1/2020 8:52 AM
67	I work from home and depend on a stable, fast internet connection. I've had KPUD fiber for the last few months and it's a huge difference in connection stability - no outages or slowdowns, even with all family members working or studying from home. And it costs substantially less. One competitive mistake Comcast makes is for we customers who subscribe to internet only - it's outrageously priced, especially for the instability of the connection.	8/1/2020 6:53 AM
68	Comcast has been the absolute worst experience I have ever had with an internet provider. Their service is terrible and sluggish, their 1TB monthly cap is an absurd money grab, and their reliability and service is absolutely dismal. I pay over 100$ a month for internet that is less than a 1/4 as fast as if I got it through a KPUD provider, and costs more than twice as much. Their tech support is so incredibly frustrating I refuse to call unless I have a multi-day issue. I cannot stand getting techs that know absolutely nothing about the local situation, and who's only response is ever to "reset your modem". With internet becoming more and more important in our lives, especially during this pandemic, I implore you to not give ANYTHING to comcast as they are a awful, consumer unfriendly company and our island deserves better.	8/1/2020 12:24 AM
69	The caps on internet usage are crazy especially with everyone home.	7/31/2020 11:10 PM
70	Our internet service is great and a good value. The cable TV and phone service were bad value.	7/31/2020 10:56 PM
71	Customer service sucks. No real contact. Does not correct problems.	7/31/2020 10:18 PM
72	Their packages for cable TV were terrible -- needed to purchase a lot of things you didn't want to get a few things you did want.	7/31/2020 10:08 PM
73	Internet quality is poor; high “max” speed that is often not met with lag spikes that breaks video conferences even running at 360p. It’s unreliable and unfortunately the only choice in town.	7/31/2020 9:47 PM
74	For some reason it can be very off and on; sometimes several times a day for weeks! Neighbors report the same issues	7/31/2020 9:06 PM
75	I don’t like the data limits for internet especially during the pandemic	7/31/2020 8:41 PM
76	I want cable but haven't been able to get it connected. Coaxial cable has exceptional noise characteristics yet comcast seems unable to make a connection more than 100 feet away. Given the driveway lengths on this island, they need to do better.	7/31/2020 8:19 PM
77	Comcast is effectively a monopoly and they act as one. Customer service is ATROCIOUS. They obviously don’t care about that because they don’t have to.	7/31/2020 7:41 PM
78	Prices are way too high!!!	7/31/2020 6:29 PM
79	I only have telephone service to get a lower monthly charge, I do not use the their telephone service, only my mobile phone which is not through them. Additionally, their prices are outrageously high. But they are a monopoly that provides good connectivity.	7/31/2020 6:27 PM
80	Include broadband solutions for all households that meet work and school from home loads as part of the contract renewal.	7/31/2020 6:12 PM
81	We need fiber optic broadband. Our current internet is slow and unreliable even though we pay for high speed. We have no choice but to keep them. If fiber optic was a more affordable option, I would change in a heartbeat. Comcast is not good.	7/31/2020 6:06 PM
82	I think the costs are just too high for the service	7/31/2020 12:37 PM

83	They need to upgrade their facilities.	7/31/2020 11:23 AM
84	Comcast has designed a system where the customer always has to perform their own diagnostics. Very difficult for older people who don't have technical skills. Internet always slows around 9 pm and we lose TV service. Comcast has added to our bill even though we negotiated a set price for two years. However, they never provide paperwork, so I have nothing to show what we negotiated. All in all, they are a terrible provider of every service.	7/31/2020 10:58 AM
85	Comcast Telephone support is Terrible!	7/31/2020 10:32 AM
86	too expensive	7/31/2020 10:20 AM
87	Pricing should be unbundled and fair.	7/31/2020 9:58 AM
88	It would be nice to have other high-speed options besides Comcast. It would be nice to have a municipal fiber utility.	7/31/2020 9:54 AM
89	They internet is too slow or too expensive. They charge you for cable, when you don't want it. They are abhorrent to deal with. Please expand fiber to the entire island! That should be a top priority for the citizens.	7/31/2020 9:50 AM
90	TV access used to be free, phone service used to be available at a modest cost, internet access should be a free public service	7/31/2020 9:32 AM
91	Comcast is an abusive monopoly service provider empowered to be abusive in their franchise agreement with the city of BI. Comcast sucks money out of our homes and has made no investment in infrastructure. Can the city kick Comcast to the curb and replace them with fiber from the Kitsap broadband PUD? By way of comparison I love Bainbridge Disposal and they have a franchise agreement with the city. From the BI Disposal customer perspective the positive experience is based on service, communication, and value for money. The residents of Bainbridge Island will never get the same kind of service from Comcast. Comcast is great at scale, terrible at service quality and value.	7/31/2020 9:12 AM
92	Hate the way they bundle services to make you buy products you might not need or want	7/31/2020 9:06 AM
93	I wish we had a choice between providers and that Comcast did not have a MONOPOLY on internet services here on BI!!!	7/31/2020 8:59 AM
94	They gouge on pricing and are unwilling to serve more rural parts of the island. I'm stuck with super slow internet as a result. Unacceptable during Covid/work-from-home times.	7/31/2020 8:46 AM
95	Comcast customer service is the worst. They constantly try to upsell and are very misleading in their interactions	7/31/2020 8:46 AM
96	Fees, taxes and equipment rental for Cable TV are far too expensive.	7/31/2020 8:31 AM