



Australia - 2021 Forecast Highlights

IP Traffic

- In Australia, IP traffic will grow 3-fold from 2016 to 2021, a compound annual growth rate of 26%.
- In Australia, IP traffic will reach 3.3 Exabytes per month in 2021, up from 1.0 Exabytes per month in 2016.
- Australia's IP networks will carry 107 Petabytes per day in 2021, up from 34 Petabytes per day in 2016.
- In Australia, IP traffic will reach an annual run rate of 39.1 Exabytes in 2021, up from an annual run rate of 12.4 Exabytes in 2016.
- In Australia, IP traffic will reach 126 Gigabytes per capita in 2021, up from 42 Gigabytes per capita in 2016.
- In Australia, average IP traffic will reach 10 Tbps in 2021, and busy hour traffic will reach 58 Tbps.
- In 2021, the gigabyte equivalent of all movies ever made will cross Australia's IP networks every 2 hours.

Internet Traffic

- In Australia, Internet traffic will grow 3.3-fold from 2016 to 2021, a compound annual growth rate of 27%.
- In Australia, busy hour Internet traffic will grow 4.6-fold from 2016 to 2021, a compound annual growth rate of 36%.
- In Australia, Internet traffic will reach 2.9 Exabytes per month in 2021, up from 907 Petabytes per month in 2016.
- Australia's Internet traffic will be 97 Petabytes per day in 2021, up from 30 Petabytes per day in 2016.
- Australia's Internet traffic in 2021 will be equivalent to 9 billion DVDs per year, 737 million DVDs per month, or 1 million DVDs per hour.
- In 2021, the gigabyte equivalent of all movies ever made will cross the Internet every 2 hours.

- Australian Internet traffic in 2021 will be equivalent to 365x the volume of the entire Australian Internet in 2005.
- In Australia, Internet traffic will reach 114 Gigabytes per capita in 2021, up from 37 Gigabytes per capita in 2016.
- In Australia, average Internet traffic will increase 3.3-fold by 2021 and will reach 9 Tbps.
- In Australia, busy hour Internet traffic will increase 4.6-fold by 2021 and will reach 52 Tbps.

Wired Wi-Fi and Mobile Growth

- Australia's Fixed/Wi-Fi was 58% of total IP traffic in 2016, and will be 59% of total IP traffic in 2021.
- Australia's Fixed/Wired was 35% of total IP traffic in 2016, and will be 31% of total IP traffic in 2021.
- Australia's Mobile was 6% of total IP traffic in 2016, and will be 11% of total IP traffic in 2021.
- Australia's Fixed/Wi-Fi was 62.1% of total Internet traffic in 2016, and will be 61.7% of total Internet traffic in 2021.
- Australia's Fixed/Wired was 30% of total Internet traffic in 2016, and will be 26% of total Internet traffic in 2021.
- Australia's Mobile was 7.4% of total Internet traffic in 2016, and will be 11.8% of total Internet traffic in 2021.
- In Australia, mobile data traffic will grow 5-fold from 2016 to 2021, a compound annual growth rate of 39%.
- In Australia, mobile data traffic will reach 348 Petabytes per month in 2021, up from 67 Petabytes per month in 2016.
- Australian mobile data traffic will grow 2 times faster than Australian fixed IP traffic from 2016 to 2021.
- Australia's Mobile was 6% of total IP traffic in 2016, and will be 11% of total IP traffic in 2021.
- In Australia, mobile data traffic in 2021 will be equivalent to 39x the volume of the entire Australian Internet in 2005.

IP Video

- In Australia, IP video traffic will grow 4-fold from 2016 to 2021, a compound annual growth rate of 29%.
- In Australia, IP video traffic will reach 2.6 Exabytes per month in 2021, up from 745 Petabytes per month in 2016.
- In Australia, IP video will be 80% of all IP traffic in 2021, up from 72% in 2016.
- In Australia, Ultra HD will be 13.9% of IP Video traffic in 2021, up from 1.1% in 2016 (113.0% CAGR).
- In Australia, HD will be 52.7% of IP Video traffic in 2021, up from 26.4% in 2016 (47.6% CAGR).
- In Australia, SD will be 33.4% of IP Video traffic in 2021, compared to 72.5% in 2016 (10.1% CAGR).
- In Australia, consumer IP video traffic will be 82% of consumer IP traffic in 2021, up from 78% in 2016.
- In Australia, business IP video traffic will be 74% of business IP traffic in 2021, up from 55% in 2016.

Internet Video

- In Australia, Internet video traffic will grow 4-fold from 2016 to 2021, a compound annual growth rate of 29%.
- In Australia, Internet video traffic will reach 2.3 Exabytes per month in 2021, up from 653 Petabytes per month in 2016.

- In Australia, total Internet video traffic (business and consumer, combined) will be 79% of all Internet traffic in 2021, up from 72% in 2016.
- In Australia, Ultra HD will be 12.7% of Internet video traffic in 2021, up from 1.2% in 2016 (107.3% CAGR).
- In Australia, HD will be 54.3% of Internet video traffic in 2021, up from 23.2% in 2016 (53.0% CAGR).
- In Australia, SD will be 33.0% of Internet video traffic in 2021, compared to 75.6% in 2016 (9.3% CAGR).
- In Australia, consumer Internet video traffic will be 81% of consumer Internet traffic in 2021, up from 77% in 2016.
- In Australia, business Internet video traffic will be 74% of business Internet traffic in 2021, up from 57% in 2016.
- In Australia, Internet-Video-to-TV traffic will be 26% of fixed consumer Internet video traffic in 2021, up from 22% in 2016.
- In Australia, Internet-Video-to-TV traffic will increase 4-fold between 2016 and 2021 (31.4% CAGR).
- In Australia, 12 billion minutes (22,948 years) of video content will cross the Internet each month in 2021. That's 4,590 minutes of video streamed or downloaded every second.
- In Australia, 73% of all Internet video traffic will cross content delivery networks in 2021, up from 63% in 2016.
- In Australia, 75.7% of all Internet video traffic will be long-form video (including live) in 2021, up from 54.2% in 2016.

IP VOD

- In Australia, Ultra HD will be 36.7% of IP VOD traffic in 2021, up from 0.8% in 2016 (164.9% CAGR).
- In Australia, HD will be 59.2% of IP VOD traffic in 2021, up from 74.8% in 2016 (18.8% CAGR).
- In Australia, SD will be 4.1% of IP VOD traffic in 2021, compared to 24.4% in 2016 (-12.9% CAGR).

Gaming

- In Australia, gaming traffic will grow 13-fold from 2016 to 2021, a compound annual growth rate of 66%.
- In Australia, gaming traffic will reach 194 Petabytes per month in 2021, up from 15 Petabytes per month in 2016.
- In Australia, gaming traffic will be 8% of consumer Internet traffic in 2021, up from 2% in 2016.

Devices

- In Australia, there will be 245.3 million networked devices in 2021, up from 135.5 million in 2016.
- In Australia, there will be 9.5 networked devices per capita in 2021, up from 5.6 per capita in 2016.
- In Australia, 34% of all networked devices will be mobile-connected in 2021.
- In Australia, M2M modules will account for 62% (151.0 million) of all networked devices in 2021, compared to 43% (58.6 million) in 2016, (20.8% CAGR).
- In Australia, PCs will account for 8% (19.2 million) of all networked devices in 2021, compared to 14% (19.0 million) in 2016, (0.2% CAGR).
- In Australia, Tablets will account for 3% (7.8 million) of all networked devices in 2021, compared to 6% (7.8 million) in 2016, (-0.2% CAGR).

- In Australia, Smartphones will account for 11% (27.8 million) of all networked devices in 2021, compared to 18% (24.2 million) in 2016, (2.9% CAGR).
- In Australia, Connected TVs will account for 14% (33.2 million) of all networked devices in 2021, compared to 15% (20.1 million) in 2016, (10.6% CAGR).
- In Australia, Non-Smartphones will account for 0.0% (71113) of all networked devices in 2021, compared to 1% (1.9 million) in 2016, (-48.2% CAGR).
- In Australia, Other Portables will account for 3% (6.3 million) of all networked devices in 2021, compared to 3% (3.9 million) in 2016, (10% CAGR).
- In Australia, 4K TVs will account for 50% (7.4 million) of all flat panel TVs in 2021, compared to 10.6% (817,750) in 2016, (55.3% CAGR).
- Australia's IP traffic from non-PC devices was 41% of total IP traffic in 2016, and will be 59% of total IP traffic in 2021.
- In Australia, PCs accounted for 59% of IP traffic in 2016, and will be 41% of IP traffic in 2021.
- In Australia, TVs accounted for 16% of IP traffic in 2016, and will be 21% of IP traffic in 2021.
- In Australia, Smartphones accounted for 12% of IP traffic in 2016, and will be 26% of IP traffic in 2021.
- In Australia, Tablets accounted for 11% of IP traffic in 2016, and will be 7% of IP traffic in 2021.
- In Australia, M2M modules accounted for 1.4% of IP traffic in 2016, and will be 4.2% of IP traffic in 2021.
- In Australia, PCs accounted for 55% of consumer Internet traffic in 2016, and will be 36% of consumer Internet traffic in 2021.
- In Australia, TVs accounted for 15% of consumer Internet traffic in 2016, and will be 22% of consumer Internet traffic in 2021.
- In Australia, TVs accounted for 11% of total Internet traffic in 2016, and will be 18% of total Internet traffic in 2021.

Speed Evolution

- In Australia, the average fixed broadband speed will grow 2.3-fold from 2016 to 2021, from 18.8 Mbps to 43.6 Mbps.
- In Australia, 87% of fixed broadband connections will be faster than 5 Mbps in 2021, up from 68% today.
- In Australia, 60% of fixed broadband connections will be faster than 10 Mbps in 2021, up from 43% today.
- In Australia, 27.4% of fixed broadband connections will be faster than 25 Mbps in 2021, up from 12.1% today.
- In Australia, 16.2% of fixed broadband connections will be faster than 50 Mbps in 2021, up from 8.6% today.
- In Australia, the average Wi-Fi speeds from mobile devices will grow 2.6-fold from 2016 to 2021, from 11.6 Mbps to 30 Mbps.
- In Australia, the average mobile connection speed will grow 2-fold from 2016 to 2021, reaching 39 Mbps in 2021.

Traffic per User and Household

- In Australia, the average Internet user will generate 98.8 Gigabytes of Internet traffic per month in 2021, up 171% from 36.5 Gigabytes per month in 2016, a CAGR of 22%.
- In Australia, the average Internet household will generate 246.8 Gigabytes of Internet traffic per month in 2021, up 177% from 89.1 Gigabytes per month in 2016, a CAGR of 23%.

- In Australia, the average FTTx Internet household will generate 423.7 Gigabytes of Internet traffic per month in 2021, 104.5% more than other broadband households.
- In Australia, the average FTTx Internet household generated 218.6 Gigabytes of Internet traffic per month in 2016, 165.8% more than other broadband households.
- In Australia, there will be 2 million Internet households (28.0% of all Internet households) generating more than 250 Gigabytes per month in 2021.
- In Australia, there will be 2 million households (19.9% of all Internet households) generating more than 500 Gigabytes per month in 2021.
- In Australia, there will be 441,428 households (5.4% of all Internet households) generating more than a terabyte per month in 2021.
- In Australia, the average mobile connection will generate 9,103 Megabytes of mobile data traffic per month in 2021, up from 2,160 Megabytes in 2016.

Traffic Topology and Traffic Patterns

- In Australia, 63% of all Internet traffic will cross content delivery networks in 2021, up from 49% in 2016.
- In Australia, peak Internet traffic will grow at a compound annual growth rate of 36% from 2016 to 2021, compared to 27% for average Internet traffic.

