

Technical challenge in merging IP networks

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14 September, 2015

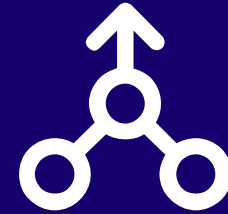
Key technical challenges



Pick the best Autonomous System number (ASN) as the combined IP network










Formulate “best of breed” implementation strategy



Create and optimise synergy from the combined IP network

Pick the best ASN

1	 Settlement Free Peering & Transit	Compare the coverage, scalability and cost of maintaining peers & transits
2	 IP Gravity	Conduct deep-dive traffic (AS number, BGP) analysis to understand the proximity of traffic flow to customers
3	 Revenue Impact on Internet Biz	Analyze the business impact due to ASN change
4	 Customer Experience	Assess the potential change of customer experience during the whole journey
5	 Resources Requirement	Estimate the resource requirement (hardware, people & time) to pre-build the network
6	 Overall Rev Impact (Migration)	Evaluate the risk of customer churn during migration
7	 Domestic Impact	Determine the cost and service impact to any of their associated domestic networks

Formulate best of breed strategy

ULTIMATE GOAL

Create a premium network by utilising the best components of each network

STRATEGIES

Interim traffic management strategy

- Optimise traffic flow between two different IP networks
- Build network-to-network (NNI) links at strategic locations to ensure in-country traffic exchange
- Maximise inter-customer traffic flow between the 2 networks
- Optimise the mutual use of peering & transit capacities on the two networks

Long-term IP network consolidation strategy

- Augment backbone infrastructure by using standardised and highly scalable hardware
- Aggregate backbone capacities into one single AS network
- Consolidate Point-of-Presence (PoP) and remove nodes with low utilisation
- Strengthen the domestic peering connectivity in strategic regions/countries by consolidating them into one IP network

Service migration strategy

- Conduct per-customer traffic profile analysis to work out the potential change of IP gravity
- Migrate customers in a country-by-country approach where the infrastructure is ready

The objectives



Network Diversity

- Merge all the on-net international and domestic paths into one single IP network
- Design the best layer 3 routing path under different path failure analysis



Network Capability

- Combine and retain the favourable service features from both networks
- Expand customer accessibility in terms of PoPs and geographic coverage



Performance Uplift

- Enhance customer-to-customer traffic exchange within one single AS network with much bigger customer base
- Improve Asia regional performance by having closer proximity to in-country peers

TELSTRA NOW PROVIDING YOU MORE




150% INCREASE IN OWNED PoP NETWORK
NOW FACILITATING ACCESS TO MORE THAN 2,000 PoPs GLOBALLY

REACHING BEYOND
230
COUNTRIES & TERRITORIES


58 DCs IN TOTAL
25 WITHIN AUSTRALIA
THE LARGEST INTEGRATED DATA CENTRE FOOTPRINT IN ASIA PACIFIC


2x TALENT POOL

RECOGNISED IN GARTNER MAGIC QUADRANT FOR:
• NETWORK SERVICES, GLOBAL, JAN 2015
• CLOUD ENABLED MANAGED HOSTING, APAC, DEC 2014


LICENSES IN 20 COUNTRIES


30% OF ASIA'S LIT CAPACITY

VOICE CAPABILITY CARRYING MORE THAN
5 BILLION MINUTES

#1 IN GARTNER'S CRITICAL CAPABILITIES FOR NETWORK SERVICES, APAC, JUL 2015 FOR:
• HIGH-CAPACITY NETWORKS
• LOW-LATENCY NETWORK


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THE FIRST SINO-FOREIGN IPVPN PROVIDER IN CHINA ENABLING LOCAL ACCESS TO
25 LOCAL PoPs AND **19** CITIES CONNECTIVITY IN

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PEN GLOBALLY CONNECTED SDN PLATFORM

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