



# Protect your businesses against DDoS attacks during your digital transformation journey

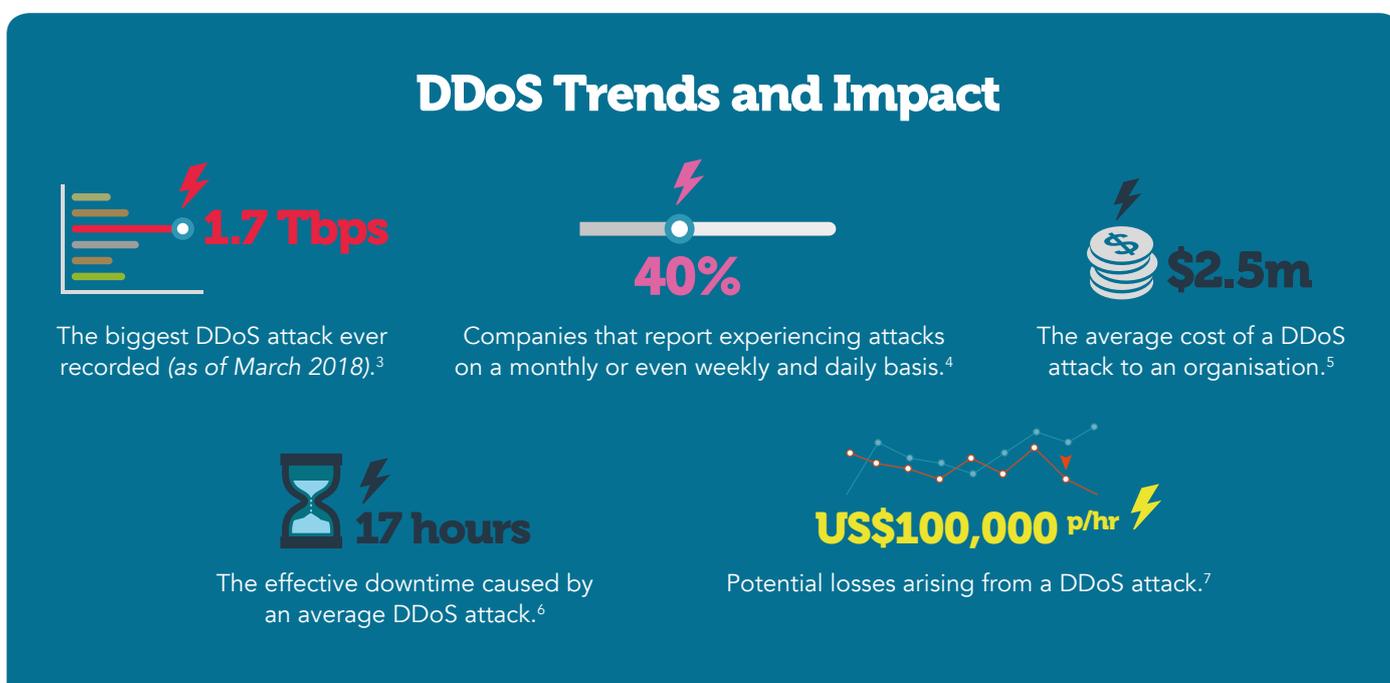
With DDoS attacks on the rise<sup>1</sup>, mitigate risks and safeguard your networks with Singtel Managed DDoS Protection Service to ensure minimal disruptions to your operations, uphold corporate credential, and prevent financial loss. Singtel Managed DDoS Protection Service is a fully managed solution that offers end-to-end managed DDoS protection for IP-based assets such as your corporate network, web services, and data centres.

# Managed DDoS Protection Service

Enterprises need to evolve to address the challenges and opportunities presented by new digital technologies or risk becoming irrelevant. Many are deploying applications across wide area networks (WAN) and the Internet to drive cost efficiencies, enhance productivity, and take advantage of new business models.

However, the digital transformation also opens up new frontiers for cyberthreats and raises the stakes involved. Attacks like a Distributed Denial of Service (DDoS), which brings down an online service by overwhelming it with traffic from multiple sources, can cost a business over US\$2.5 million<sup>2</sup> as customer-facing services become unavailable, normal operations are disrupted, and user productivity is lost. Therefore, it is important to protect your enterprise against DDoS attacks, especially if you have customer-facing applications, and cannot afford a disruption to these services.

DDoS attacks are also growing exponentially in size with an attack earlier this year registering an intensity of 1.7Tbps, a 200-fold increase from 8Gbps 14 years ago. Firewalls and intrusion prevention systems also continue to be targeted, with enterprises reporting that over half of their devices have failed as a result of a DDoS attack, putting system integrity and data confidentiality at risk.



## Managed DDoS Protection Service

A fully managed solution that offers end-to-end managed DDoS protection for the corporate network, web services, and data centres, organisations are enabled to stay ahead of threats in real-time, round the clock. It proactively monitors, detects, mitigates, and protects the business against destructive disruptions caused by DDoS attacks.

<sup>1</sup> Coreero DDoS Trends Report Q2-Q3 2017

<sup>2</sup> ZDNet, "The average DDoS attack cost for businesses rises to over \$2.5 million", May 2017

<sup>3</sup> The Register

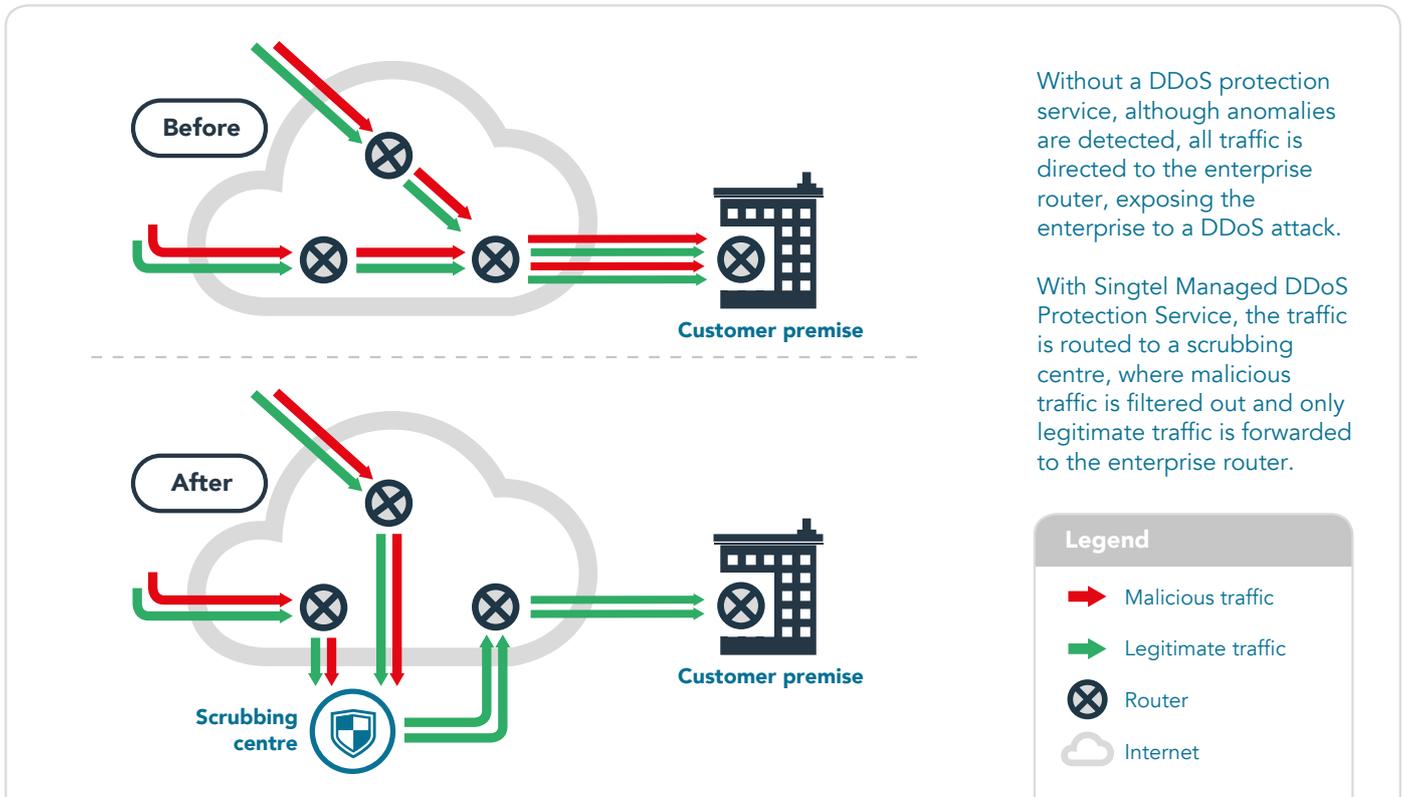
<sup>4</sup> Coreero 2017 DDoS Attack Protection Infographic

<sup>5</sup> Worldwide DDoS Attacks & Cyber Insights Research Report, May 2017, Neustar

<sup>6</sup> DDoS: A Clear and Ever Present Danger, the report, May 2016, IDG Connect

<sup>7</sup> Worldwide DDoS Attacks & Cyber Insights Research Report, May 2017, Neustar

## Protect your network from DDoS attacks



## Available service schemes

Different services schemes are available to address a wide range of DDoS protection needs. These range from the DDoS Shelter schemes suitable for smaller enterprises with little or no in-house IT expertise, to the Enhanced On-demand scheme for multinational and large enterprises with a geographically-distributed presence.

Schemes	DDoS Shelter	Basic	Standard	Enhanced On-demand
Contract terms	3 months (when the first DDoS attack on your company is recorded)	Minimum 12 months		
Delivery mode	Proactive monitoring			
Mitigation mode	Auto	Auto via standing order or manual by customer authorisation		
Layer 3-4	Detection & mitigation			
Up to layer 7	No	Mitigation on request		
Intelligence driven advisories for impending DDoS campaigns	No		Yes	
DDoS drills	No		1 x during provisioning 1 x on annual basis	
Global offload to cloud scrubber up to 1Tbps	No		1 x activation bundled	
SOC portal	No	Yes		
Mitigation period (Initial blocks)	72 hours			

## Features

Singtel Managed DDoS Protection Service is a suite of holistic managed security services that empowers enterprises to take a more proactive approach to cyber defence.



### Proactive monitoring

- The enterprise's Internet traffic is monitored over a period of time to establish the baseline for the company's typical Internet traffic profile.
- Internet traffic is monitored proactively 24/7 and a DDoS alert is raised when anomalies are detected in the traffic profile.
- Predictive analytics with extensive contextual intelligence helps address all network security threats.
- Under enhanced service schemes, advanced intelligence-driven advisories alert enterprises to impending attacks.



### Incidents response

- Singtel Security Operations Centre (SOC) notifies the enterprise of a possible DDoS attack within 15 minutes of detection.
- Upon confirmation, DDoS incidents are escalated for rapid threat mitigation and resolution.



### Threat mitigation

- The traffic is re-directed to a scrubbing centre where malicious traffic is filtered from legitimate traffic.
- Legitimate traffic is re-injected using state-of-the-art technology, ensuring that only legitimate traffic is forwarded to the enterprise router.
- Scrubbing centres are backed by global cloud scrubbers which can handle up to 7Tbps of traffic.



### Reporting

- Up-to-date incident case management and reports available via the SOC Portal.
- Real-time DDoS attack reports can be monitored and viewed via a secure login access.
- On-going incident status email updates.
- Post-incident reports provide traffic profiles and other details before and after the DDoS mitigation.



### Preparedness

- Joint DDoS Incident Readiness Exercises are conducted to ensure operational integration between Singtel and your enterprise.

## Benefits



### Round-the-clock protection

- Ensures the availability of websites and systems with always-on service.
- Reduces risk of data loss/theft, revenue loss, brand defacement, and loss of corporate credibility.



### Highly-scalable

- Enables the enterprise to mitigate against larger-than-expected DDoS attacks up to terabit-scale with on-demand capacity.



### Peace of mind

- Detects DDoS attacks and Internet traffic abnormalities before they can cause huge financial losses.
- Provides enterprises with access locally in the same time zone to expertise from Singtel's Advanced Security Operations Centre (ASOC) to manage advanced threats.
- Ensures business continuity by only allowing legitimate traffic to pass through during a suspected DDoS attack.



### Better visibility

- Improves visibility and provides better control with real-time dashboard and comprehensive incident reporting.
- Protects against new and evolving threats with intelligence monitoring and reporting.



### Cost-effective

- Low total cost of ownership (TCO) with no upfront capital expenditure.
- Requires minimum IT resources and involvement required from the enterprise.
- Relieves burden on IT staff and frees up limited IT resources to focus on core business objectives.

## Why Singtel



<sup>8</sup> Gartner, "Magic Quadrant for Managed Security Services, Worldwide" by Toby Bussa, Kelly M. Kavanagh, Pete Shoard, Sid Deshpande, February 27, 2018

<sup>9</sup> IDC MarketScape: Asia/Pacific Managed Security Services 2018 Vendor Assessment

# About Singtel

Singtel is Asia's leading communications technology group, providing a portfolio of services from next-generation communication, technology services to infotainment to both consumers and businesses. For consumers, Singtel delivers a complete and integrated suite of services, including mobile, broadband and TV. For businesses, Singtel offers a complementary array of workforce mobility solutions, data hosting, cloud, network infrastructure, analytics and cybersecurity capabilities. The Group has presence in Asia, Australia and Africa and reaches over 685 million mobile customers in 22 countries. Its infrastructure and technology services for businesses span 21 countries, with more than 428 direct points of presence in 362 cities. For more information, visit [www.singtel.com](http://www.singtel.com).

## Awards

Asia Communication Awards  
Cyber Safe Award - Singtel Managed Security Services (2018)

Frost & Sullivan APAC Best Practices Awards  
Singapore Managed Security Service Provider of the Year (2016 - 2017)

Gartner's Magic Quadrant for MSS, Worldwide  
Leaders' Quadrant (Trustwave) (2018)

IDC MarketScape: Asia-Pacific Managed Security Services  
Trustwave is named a Leader (2018)

NetworkWorld Asia Information Management Awards  
Disaster Recovery & Business Continuity (2014 - 2017)  
Regional Security Operations Centre (2017)  
Security-as-a-Service (2012 - 2018)

SC Awards  
Best Managed Security Service (Trustwave) (2017)

Telecom Asia Awards  
Most Innovative Approach to Mobile Security (2017)

