



ASX SDC Customer Migrations

Customer Migration Scope of Work

November 2019

Table of Contents

1	Change Description.....	3
1.1	Impact.....	3
1.2	Customer Requirements and Pre-Requisites	3
1.3	Emergency Contacts and Escalations	3
1.3.1	Customer Technical Support.....	3
1.3.2	Connectivity Support	3
1.3.3	Philip Brown Manager, Connectivity Services, Operations Design.....	3
1.3.4	Jason Neubert Connectivity Support Engineer, Customer Support	3
2	TPG Circuit Delivery	4
3	Scope of Works.....	5
4	Rollback	6
4.1	Rollback Procedure	6
5	Testing Process	7
5.1	Ping Test	7
5.2	Ping Test	8
5.3	Ping Test	9
5.4	Bandwidth Servicer Testing.....	10

1 Change Description

ASX is currently undertaking a BCP site data centre migration. All services and customer connections to the current BCP data centre will relocate to SDC by end date June 2020.

TPG have been engaged to install a new dark fibre from customer site to SDC. ASX engineer will attend site and physically migrate all ASX CPE secondary link connectivity from the Bondi circuit, to the new SDC circuit.

1.1 Impact

No expected outage to any ASX service connections during the migration works.

All customer access to secondary circuit connectivity will be isolated for the duration of the migration works. This includes ALC Direct Backup services (bandwidth connections).

1.2 Customer Requirements and Pre-Requisites

Prior to site access and migration works, customers will be required to prepare and provide:

- Contact and escalation details for TPG access
- Access requests and approval for TPG to install and test new SDC fibre circuit
- Any cross connects required from TPG circuit demark to rack hosting ASX CPE (if TPG FTP is separate from ASX system)
- Access requests and approval for ASX engineer to perform service migrations

1.3 Emergency Contacts and Escalations

1.3.1 Customer Technical Support

- Email: CTS@asx.com.au
- Ph: +61 2 9227 0372

1.3.2 Connectivity Support

- Email: connectivity@asx.com.au
- Ph: +61 2 9227 0101

1.3.3 Philip Brown Manager, Connectivity Services, Operations Design

- Email: Philip.brown@asx.com.au
- Ph: +61 7 3835 4028

1.3.4 Jason Neubert Connectivity Support Engineer, Customer Support

- Email: jason.neubert@asx.com.au
- Ph: +61 2 9227 0388

2 TPG Circuit Delivery

The delivery of a new TPG dark fibre circuit between the customer data centre must be completed prior to the scheduling of the SDC migration tasks.

Customers are required to organise access for TPG contractors to complete the installation and testing. TPG contractors must comply with all customer access policies and time restrictions.

As per current ASX Net delivery standards, if the TPG FTP is not located in the same rack as the ASX CPE, customers will provide any cabling or cross connects required between the FTP and CPE rack within the facility.

3 Scope of Works

Task	Scope
1	Pre work visual inspection. Ensure no visible issues with any equipment or connections in the customer rack
2	Test new receive light levels for SDC circuit across all wavelengths. Record results
3	<p>**Rollback Decision**</p> <p>If light received is below LOW threshold, reconnect Bondi circuit and log case with TPG for investigation</p>
4	Remove and label patch for legacy circuit, from either ASX MUX and or other ASX CPE devices
5	Replace SFP's and record light levels transmitted prior to mux
6	Patch new SDC Circuit to MUX or ASX CPE Devices
7	Install attenuator (if requirement is determined by engineer)
8	Network testing (see testing process)
9	<p>**Rollback Decision**</p> <p>If cutover is not successful during the schedule change window, customer contacted and rollback of all changes will take place.</p>
10	Confirmation of successful migration
11	Take photos of ASX equipment post change
12	Inform customer of change completion, provide change details, and test results.

4 Rollback

Bondi circuit will remain in place during the cutover process.

Rollback decision points at tasks 3 and 9 are to determine if any issues encountered are repairable, do not impact production services, or fixed forward in agreement with the customer.

If issues encountered do not meet the above criteria, rollback will be initiated.

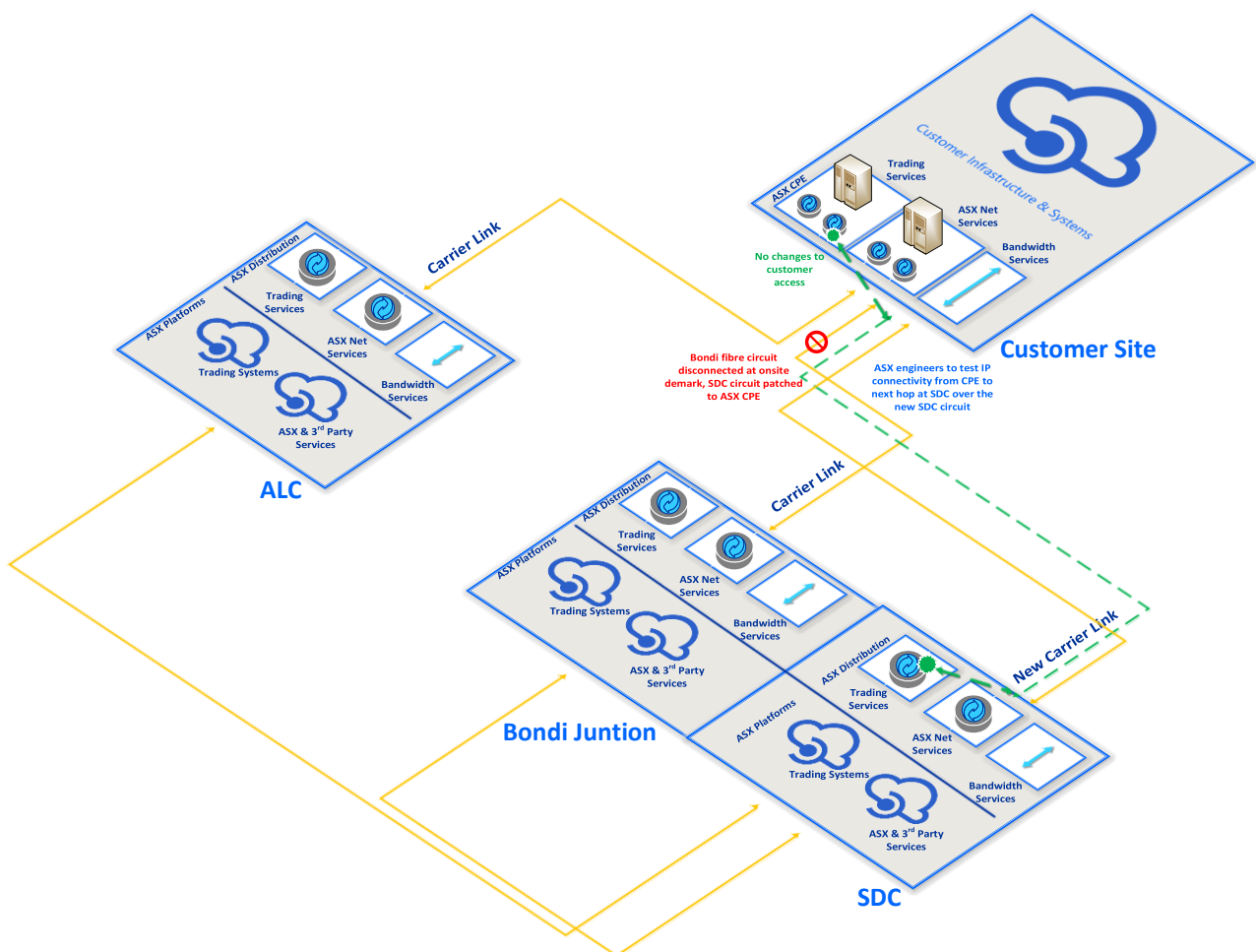
4.1 Rollback Procedure

Task	Scope
1	Pre work visual inspection. Ensure no visible issues with any equipment or connections in the customer rack
2	Test new receive light levels for Bondi circuit across all wavelengths. Record results
3	Repatch from either ASX MUX and or other ASX CPE devices to the Bondi circuit or cross connect
4	Remove attenuator (if requirement is determined by engineer)
5	Network testing (see testing process)
6	**Rollback Complete** If cutover is not successful during the schedule change window, customer contacted and rollback of all changes will take place.
7	Take photos of ASX equipment post change
8	Inform customer of change completion, provide change details, and test results.

5 Testing Process

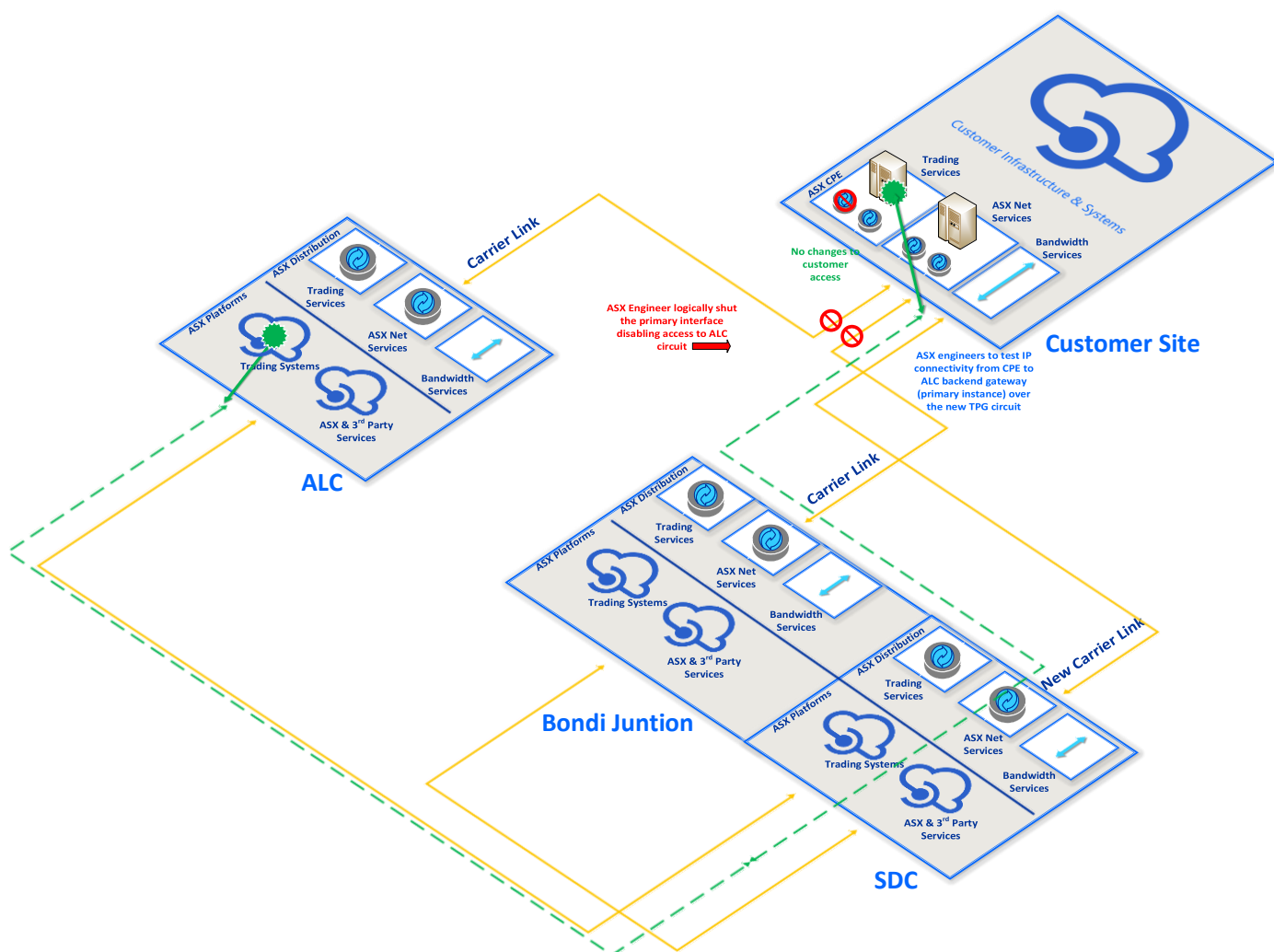
5.1 Ping Test

Ping from secondary CPE WAN interface to next hop SDC fanout.



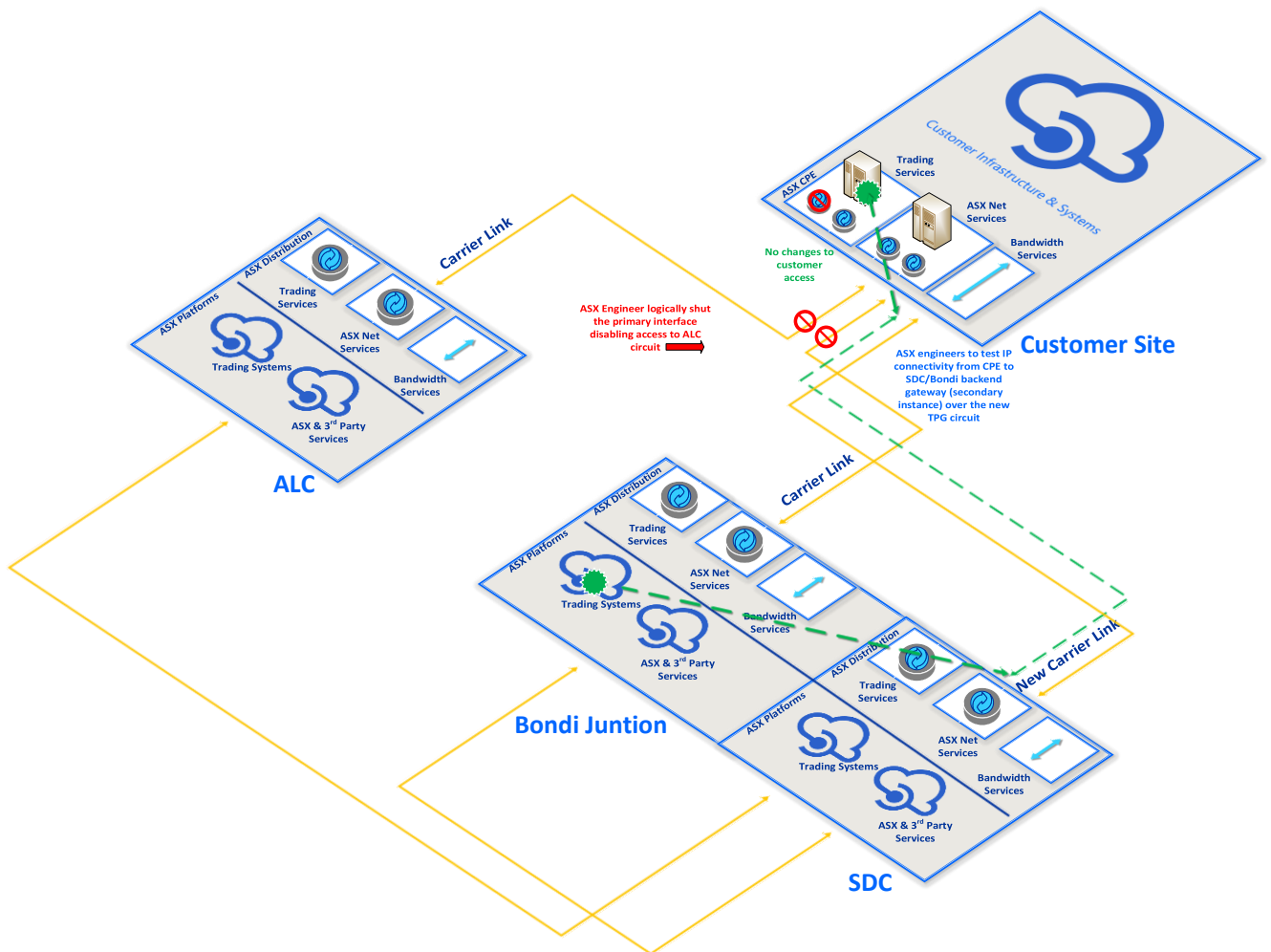
5.2 Ping Test

Shut Primary CPE WAN interface and ping from CPE gateway to ALC backend gateway.



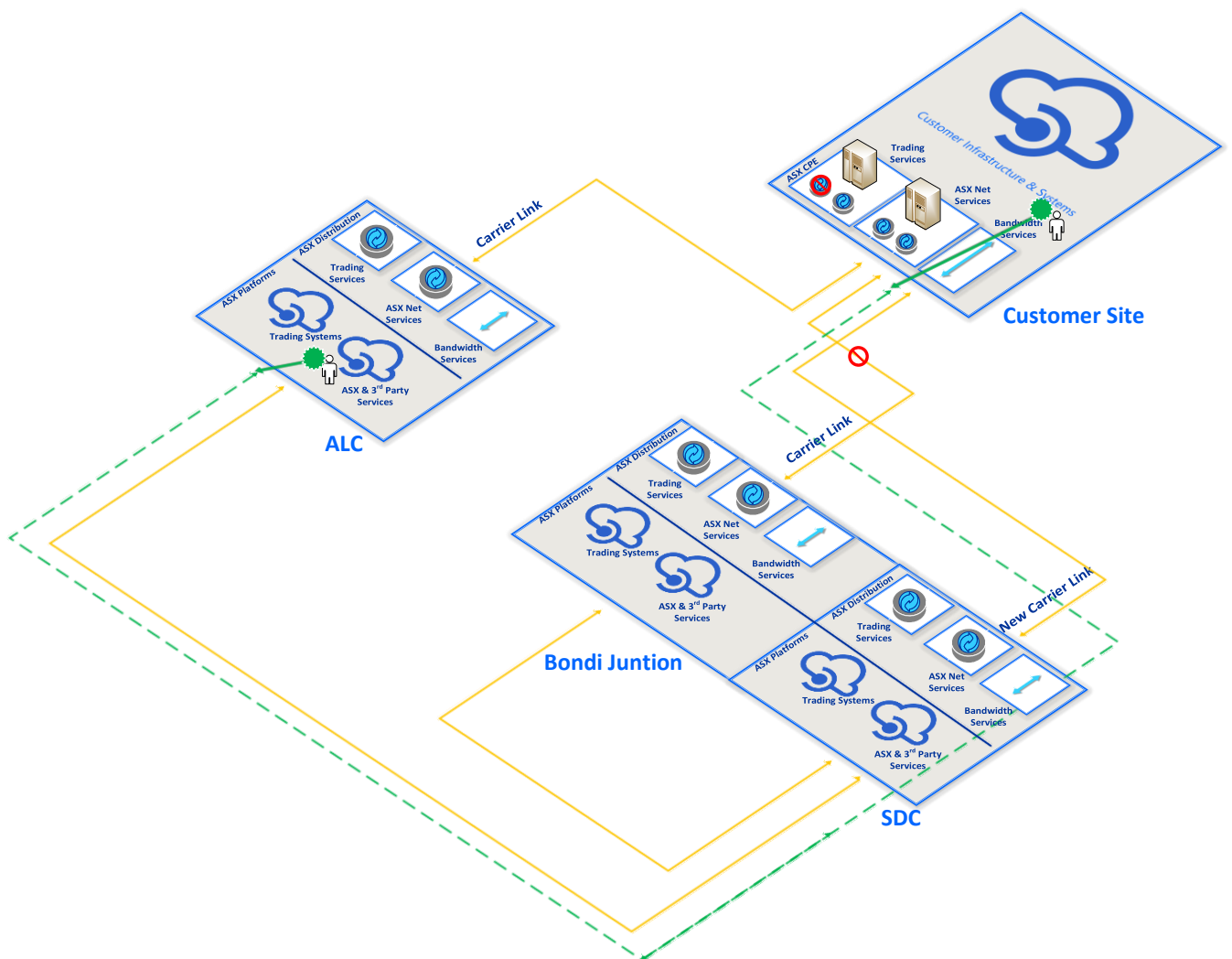
5.3 Ping Test

Shut primary CPE WAN interface and ping from CPE gateway to Bondi/SDC backend gateway



5.4 Bandwidth Servicer Testing

RFC2544 validation test.



Disclaimer

This document provides general information only and may be subject to change at any time without notice. ASX Limited (ABN 98 008 624 691) and its related bodies corporate (“ASX”) makes no representation or warranty with respect to the accuracy, reliability or completeness of this information. To the extent permitted by law, ASX and its employees, officers and contractors shall not be liable for any loss or damage arising in any way, including by way of negligence, from or in connection with any information provided or omitted, or from anyone acting or refraining to act in reliance on this information. The information in this document is not a substitute for any relevant operating rules, and in the event of any inconsistency between this document and the operating rules, the operating rules prevail to the extent of the inconsistency.

ASX Trade Marks

The trademarks listed below are trademarks of ASX. Where a mark is indicated as registered it is registered in Australia and may also be registered in other countries. Nothing contained in this document should be construed as being any licence or right to use of any trade mark contained within the document.

ASX®