

# ASX Secondary Data Centre Relocation

## Requirements Summary

Version 1.0 | November 2019

## Table of Contents

|   |   |   |
|---|---|---|
| 1 | Introduction .....                                    | 3 |
| 2 | Why is ASX relocating its secondary data centre?..... | 3 |
| 3 | When is this happening? .....                         | 3 |
| 4 | Migration Strategy .....                              | 3 |
| 5 | Key Milestones and Customer Actions .....             | 4 |
| 6 | Frequently Asked Questions .....                      | 5 |

## 1 Introduction

ASX will be relocating its secondary data centre from the current location in Bondi Junction to a new facility located in Pemulwuy. The ASX secondary data centre (SDC) is the secondary site to the primary data centre, the Australian Liquidity Centre (ALC). SDC provides continuity of ASX services in the event of unexpected service and/or connectivity interruptions.

## 2 Why is ASX relocating its secondary data centre?

The current secondary data centre in Bondi Junction has been identified as an aged asset risk. As such, we are currently undertaking a project to relocate all business continuity planning (BCP) and disaster recovery (DR) infrastructure to a different data centre facility. The new SDC facility selected is a Tier III standard, purpose built, colocation data centre. The relocation from Bondi to SDC will reduce current risks such as aged plant and mechanical equipment, limited floor space, aged cabling and limited power supply capacity. Concurrently, a refresh of core technologies will allow for greater expansion of products and improvement of services, e.g. CHES Replacement, ASX Trade Refresh and ASX Net.

## 3 When is this happening?

The migration of secondary instances of ASX systems from Bondi Junction to Pemulwuy will commence from November 2019 with a progressive implementation of trading, clearing, settlement, and other ASX secondary systems throughout 2020. We will communicate the subsequent migration schedule for these services via the [SDC Relocation landing page](#), and will contact customers directly to discuss arrangements for backup circuit move for their ASX Net services.

## 4 Migration Strategy

We have split the SDC migration activities into two independent streams:

1. ASX backend and service migrations
2. Customer migrations

For ASX backend and service migrations, we are changing the backup connection from the legacy Bondi circuit over to the new SDC circuit. With assistance from TPG we will reach out to customers to request ASX Net site access. Here we will arrange a physical change only of the patching on the ASX owned customer premises equipment (CPE) devices. There is no change to the customers' configuration nor the ASX services target IP addresses.

For the customer migrations stream, we will contact customers well in advance to schedule their site migration to confirm dates, customer contacts and timings. At the agreed date/time for the scheduled site cutover, an ASX support representative will be on-site to facilitate the migration of customer connections to SDC and to perform and coordinate testing of ASX devices.

## 5 Key Milestones and Customer Actions

| Date                                  | Action   | Customer Requirements   |
|---------------------------------------|--|---|
| <b>November 2019 to February 2019</b> | ASX and TPG Telecom will require access to each ASX Net site to terminate and test the provided parallel fibre connections to the new SDC. We will be contacting ASX Net customers to arrange installation and site access.  | Customer to provide their nominated contacts whom we can liaise with during the stages of the ASX Net site migration to SDC.<br>Customer to grant access requests and approval for TPG to install and test the new SDC fibre circuit. |
| <b>From November 2019</b>             | In the event the termination is not in the same rack as the current ASX infrastructure, the customer will be responsible to ensure connectivity between the ASX Net/TPG fibre termination point and the ASX equipment.<br><br>ASX will advise the termination point when the TPG circuit is completed. | If applicable, customer to organize a cross connect from the termination point to the rack hosting the ASX infrastructure.  |
| <b>From November 2019</b>             | ASX will test and perform backend and service migrations at the customers' ASX Net site.   | Customer to grant site access and approval for ASX engineers to perform this action.  |
| <b>From November 2019 to May 2020</b> | ASX will migrate the secondary circuit to the new SDC connection at the customers' ASX Net site. Here we will require physical access to perform the cutover. Note this may require additional inter-rack patching and the replacement of SFP's.   | Customer to grant site access and approval for ASX engineers to perform this action.  |

## 6 Frequently Asked Questions

### **Are there any functional changes with the migration to SDC?**

ASX is only repatching the backup circuit to the SDC for each site as part of the relocation. The functionality of the services over the ASX Net network will not change as part of this upgrade. Access, user accounts and passwords will not change.

### **Will I be required to make any configuration changes such as duplexing, IP addressing and routing?**

No. It is a physical change only of the patching on the ASX CPE devices from the Bondi circuit to the new SDC circuit. There is no change to the customers' configuration nor the target IP addresses of the ASX services.

### **What are the Risks?**

ASX will aim to minimize risks during the customer site migration. This work has a low risk profile due the extensive secondary circuit testing performed by both TPG telecom and the ASX prior to any physical cabling changes to the ASX CPE devices on the customer sites.

#### Physical works in production environments

ASX migration plan is to utilise existing devices to minimise the physical interruption of primary connectivity to ASX services, and avoid any damage to customer owned infrastructure during the circuit migration.

#### Third party works and access

Customers have supplied contacts for access arrangement and approval for carrier contractors to install new circuit demarcation points in the existing DCs.

#### Cutover failure

The existing Bondi circuit and cross connect will remain in place to enable rollback at any point.

ASX will conduct controlled pre-testing of services as part of the SDC build and delivery. Test plans and key milestones for each cutover will be provided to customers prior to the scheduled migration date.

If the cutover fails for any reason, an assessment and decision will be made with the customer to either rollback or move forward with the cutover.

#### Cutover time

ASX will provide in advance a schedule and an expected window for cutover. This will include milestones within this window for go/no go decision points in the event of an issue.

## Testing

With the exception of Layer 1 and Layer 2 bandwidth services, all ASX Net connectivity can be tested by ASX from the CPE control points without involvement from the customer.

### What are the testing arrangements?

ASX will test network connectivity under normal operation from the CPE control points in customer racks. CPE devices owned and operated by ASX provide controlled access points to test from without interrupting customer network connectivity to the device. This testing will not require customer involvement at the time.

Logical shutdown of the primary WAN links will occur as part of the testing process. There will be no physical work undertaken on the primary connections during the SDC circuit cutover.

ASX will test Layer 1 and Layer 2 backup bandwidth ASX Net services via SDC prior to handing over the new circuit to the customer. This cutover will require downtime for the backup service and will require customer signoff that the service is stable and completed.

The [SDC Relocation landing page](#) will contain the BCP test schedules once available.

ASX 24 will have a scheduled Dress Rehearsal (IWT) for go-live at SDC on the 28<sup>th</sup> March 2020.

### Does the customer migration have to be on a weekend?

ASX will advise the cutover schedule options as per our standard maintenance windows. However, we welcome customers to provide a recommendation for the cutover and testing time based on their internal policies and operational guidelines.

### Will TPG Telecom use the existing demark termination point to terminate the new dark fibre or use a new fibre termination point?

ASX has engaged TPG Telecom to build in parallel the SDC from all exiting ASX Net sites. It is the intention TPG will be utilising the existing fibre bundles and fibre termination points to provision the new SDC connections. Currently they are performing feasibility, capacity and commonality checks before finalizing designs. ASX will advise if there are any changes to the demarcation.

### Who is responsible for the cross connects.

In the event that the ASX Net (TPG) termination is not in the same rack as the current ASX infrastructure then the customer will be responsible for connectivity between the ASX Net (TPG) fibre termination and the ASX equipment. This responsibility will extend to production outage investigations and issue resolutions.

In hosted data centres or where ASX Net (TPG) fibre termination cannot be delivered to the customer rack, the customer is responsible for ordering, costs, management and issue resolution of the cross connection.

The fibre cross connect must be provisioned as a single mode fibre pair rated 1310nm to 1550nm. The fibre end must be labelled with the services they represent including the service number and the from termination port details. The customer is responsible for notifying ASX of the service number and the termination port details to facilitate the commissioning of the service.

## 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®