



Internet
Association
of Australia

Member Forum 2023

Portal Updates

August 2023





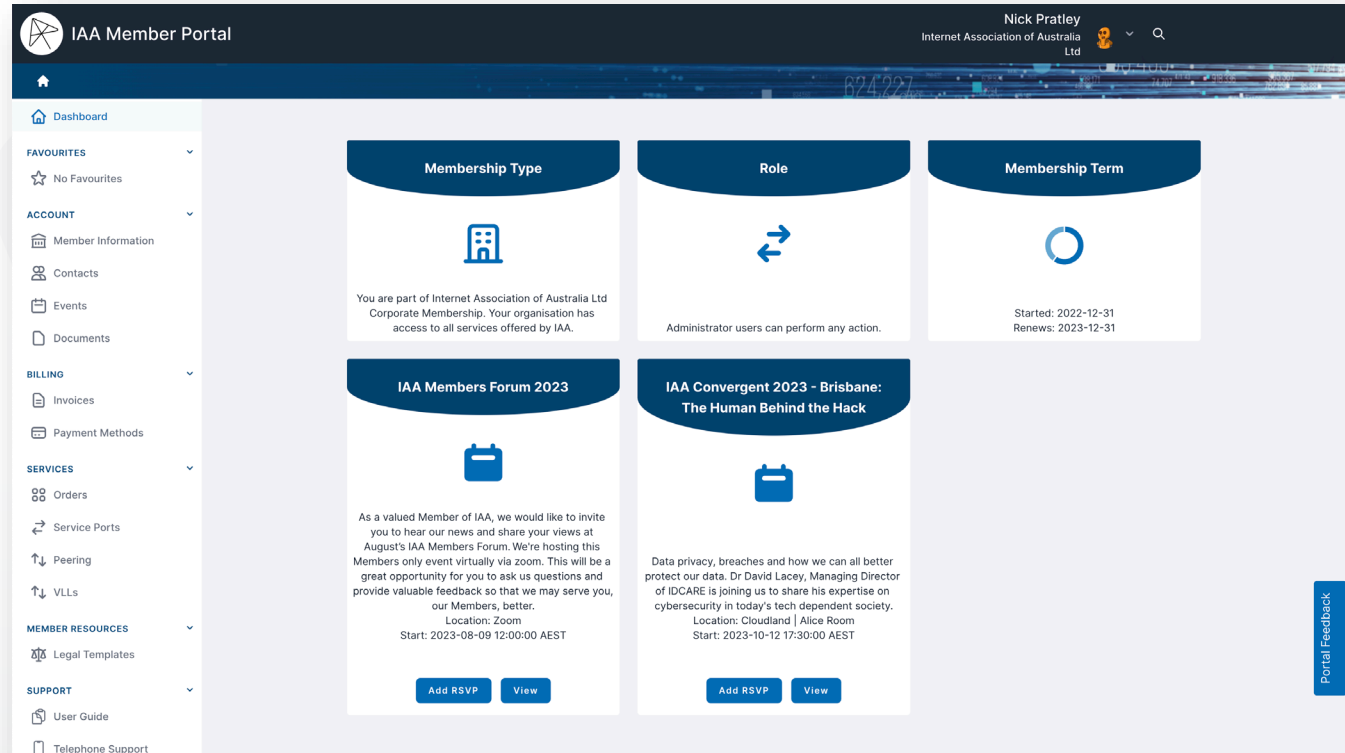
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Portal Update



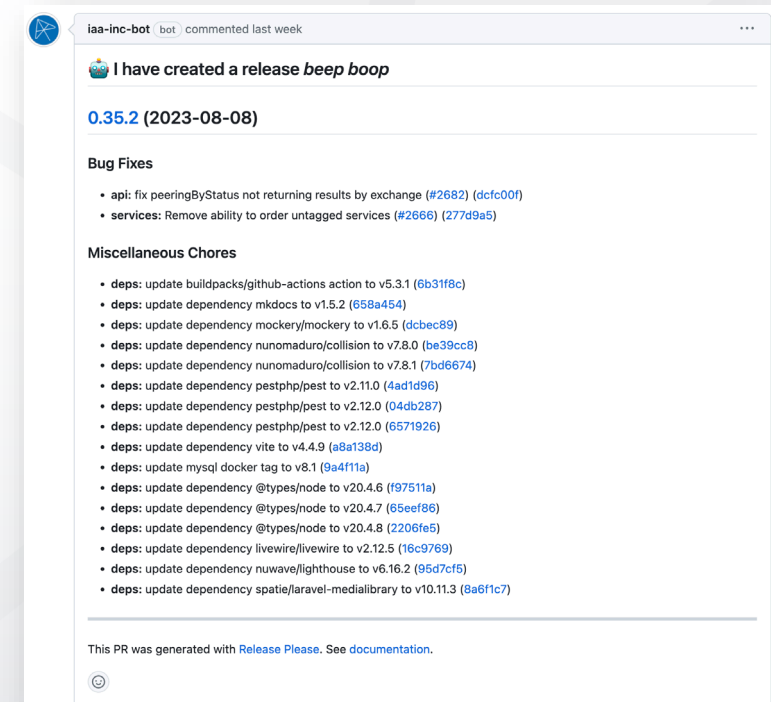
Portal – The Stack

- Frontend – TALL Stack
 - Tailwind CSS
 - Alpine JS
 - Laravel
 - Livewire
 - Yes, it's PHP – but 8.2 is nice.
- Backend
 - Laravel Nova – Admin
 - Laravel Horizon – Jobs
 - Laravel Telescope – Debugging Assistant



Portal – Behind The Scenes

- Lots of GitHub Actions
 - Mend Renovate for dependency management. Each package update gets an automatic pull request – tests are run and auto merged on success
 - Release Please for release automation
 - automatic versions
 - changelogs
 - releases
 - Heroku Buildpacks for containers
- Full test and CICD suite
 - 453 tests, 62.5% code coverage
 - 85% coverage across payments



Portal – Behind The Scenes *contd*

- Kubernetes Cluster
 - Entirely managed as GitOps with Flux and Renovate
 - Looking to replace Flux with ArgoCD – does anyone have thoughts on it?
 - Portal built into 3 containers
 - Scheduler
 - Runs every minute as a k8s job, schedules things
 - Worker
 - 1 instance running for async things
 - Emails, automatic payments, etc
 - Web
 - 1 instance, can scale – but no need
 - DB & Storage
 - Postgres, Redis and Minio

```
→ ~ kubectl get pods -n iaa-portal
```

NAME	READY	STATUS	RESTARTS	AGE
ixportal-laravel-cronjob-28191535-v5tz2	0/1	Completed	0	2m35s
ixportal-laravel-cronjob-28191536-g74kb	0/1	Completed	0	95s
ixportal-laravel-cronjob-28191537-74t22	0/1	Completed	0	35s
ixportal-laravel-web-8879c5797-kxhrr	1/1	Running	0	6d7h
ixportal-laravel-workers-7f9c66f987-h4nfc	1/1	Running	0	6d7h
ixportal-postgresql-0	1/1	Running	0	337d
ixportal-redis-master-0	1/1	Running	0	337d
minio-74bd5f94b-75282	1/1	Running	0	337d

Portal – New Feature – Member Resources

- IAA engaged Arnotts Technology Lawyers to develop legal templates for all IAA members to use for free, including:
 - Privacy Policy
 - Mutual NDA
 - Hardship Policy
 - Etc.
- Designed to help you be compliant with requirements from govt
- Want any others? Let us know.

Portal – The Future

- Laravel Nova is just not working
 - We've hit the limit of what we can accomplish with Nova
 - "Can you do this?" "No, sorry – Nova doesn't let us" - I feel like I say this too much
 - Meant to be a "developer interface to your data", not an admin panel for staff – whoops
 - Replace with Filament
- Frontend tables are Filament already
 - Finish the rest of the pages and components
 - Will lead to a more consistent design all around for data display, and less CSS / HTML to care about
- Meilisearch
 - Let's be honest, our search sucks. We are looking to index all data in Meilisearch for consumption from the frontend and backend portals

Portal – The Future *contd*

- Alerts and better marketing lists
 - Service events and alerts in the portal
 - We are going to fix marketing comms
 - More control over what you can opt in and out of
- Billing and Payments
 - We keep hitting weird loopholes with Xero that don't seem important for them to fix (some have been on Xero Central for ~10 years)
 - Bringing in house, portal will generate invoices, and store them in Xero for accounting purposes only – easier for staff when you need VLL speed changes
 - Replace PayWay with Stripe for Credit Card processing
 - Do you want to see bank payments? Researching Go Cardless and BPay options to add to portal
- Metrics
 - Bringing more metrics and graphs into the portal
 - Optical DOM, service graphs, VLL usage, route server info
 - Anything else you want to see in here?

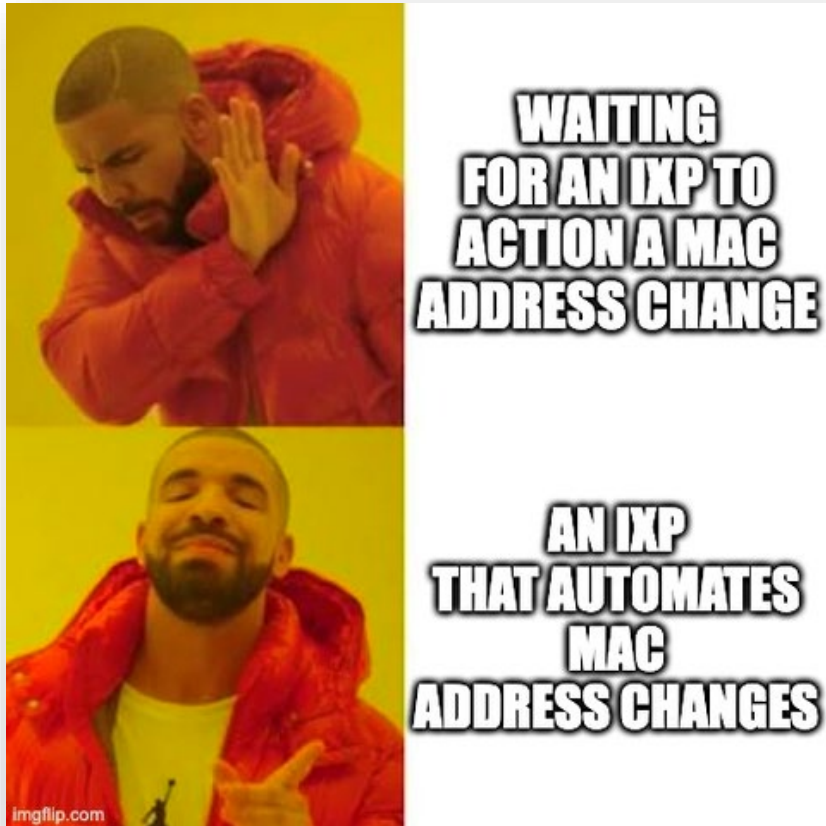
Portal – Questions?

1. Does anyone have thoughts on ArgoCD?
2. Do you want or care for Bank / PayTo / BPay payment options?
3. What other metrics, graphs or information would you find useful in the portal?
4. Anything else you want to know?

Hit me up, nick@ix.asn.au!

One more thing...

Portal – Network Automation

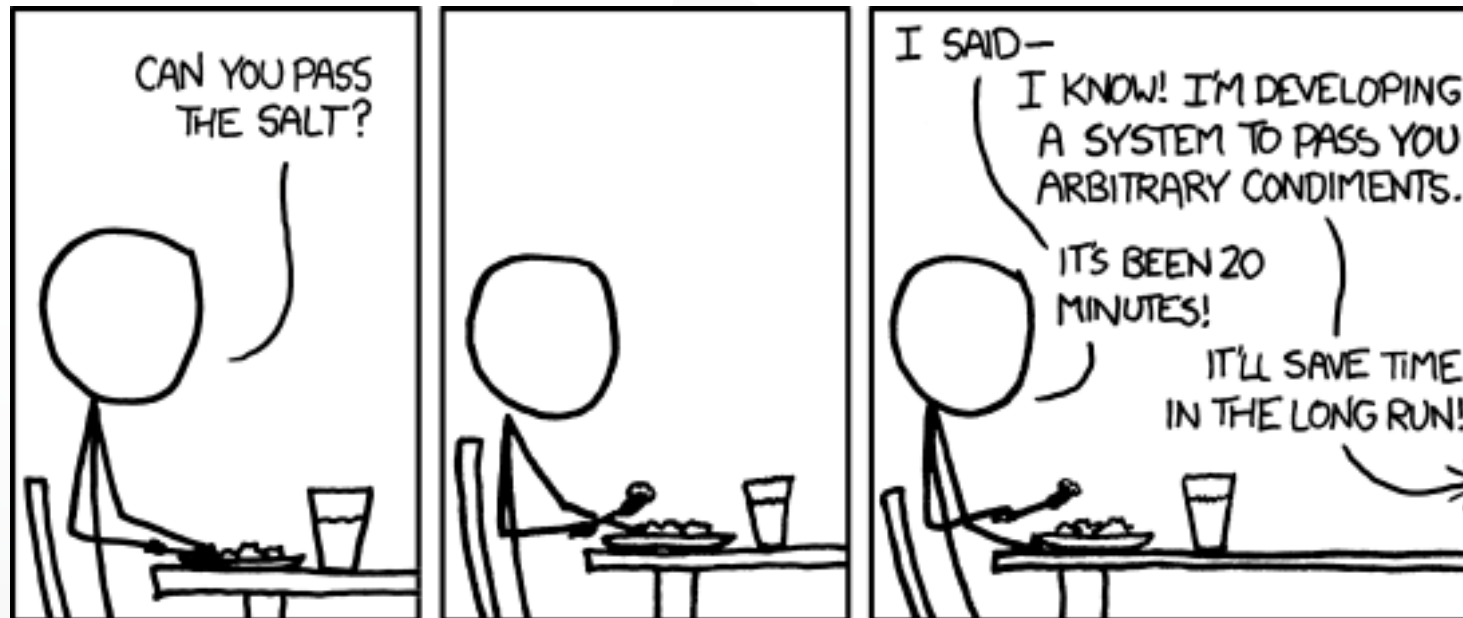


Matt Kobayashi, 2023



https://twitter.com/acontios_net/status/1679499010757783557

Portal – The Magic Behind Network Automation



Portal – The Magic Behind Network Automation

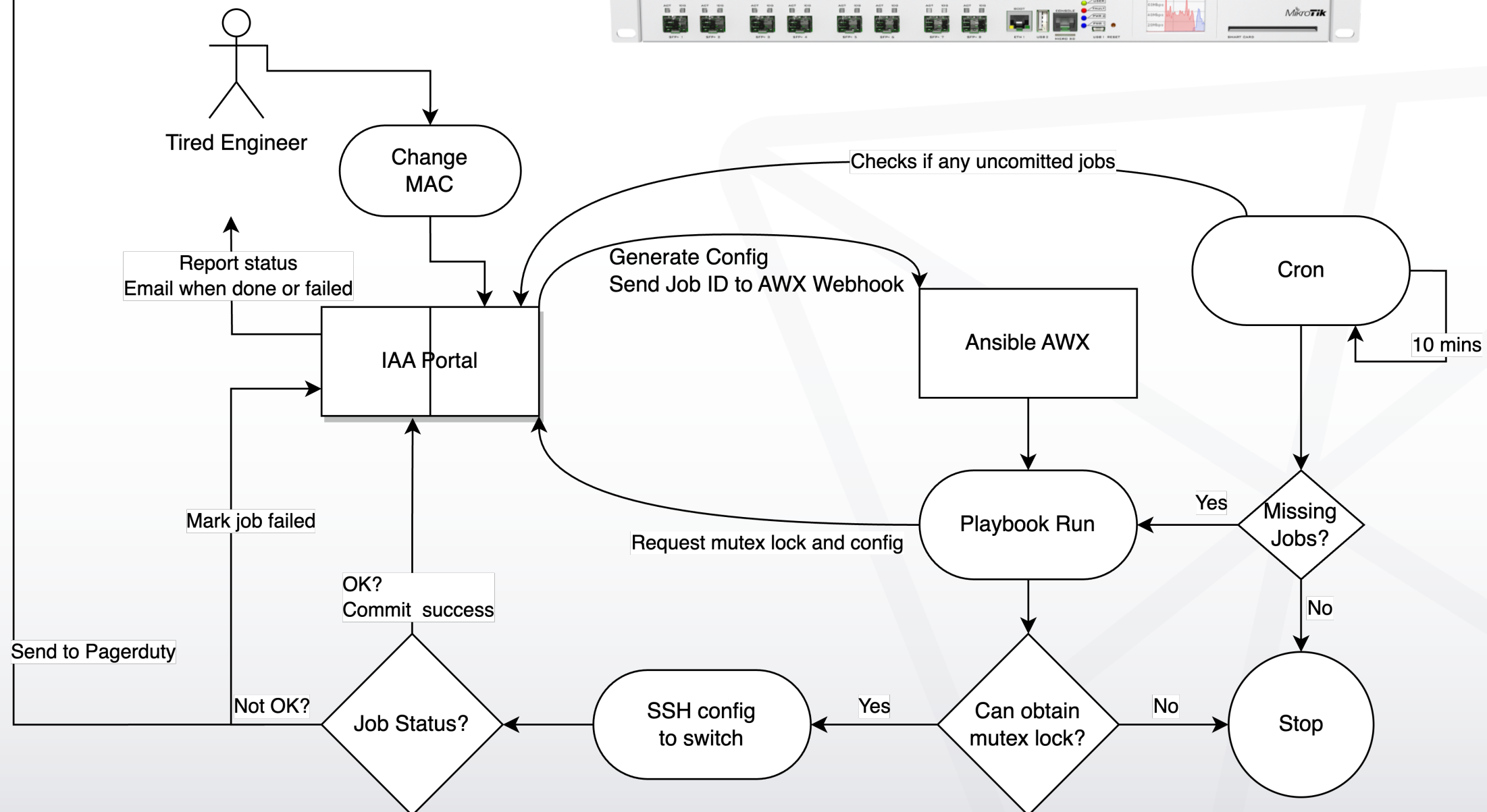
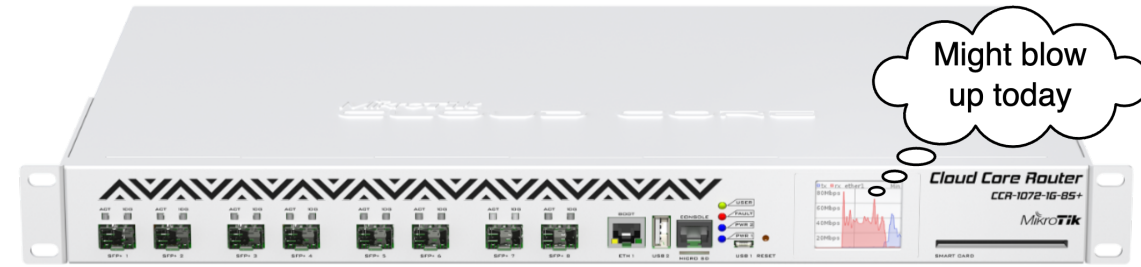
- The biggest problem to solve with brown field automation

STATE CONSISTENCY

- How can you feel comfortable deploying changes automatically, is the data in my database correct? Has someone deployed config without documenting it etc.?
- You do things twice! We are deploying Nautobot, which pulls state from our portals API, generates config for switches top down, and validates that against what lives on the switches. Consistency will be checked every other hour, and if anything is not right, engineers will be alerted to resolve.

PagerDuty

WAKE UP!



Portal – Network Automation *contd*

- What can you do?
 - MAC and VLAN changes for all services
 - VLL provisioning and speed changes
 - Service migrations between owned ports
 - Convert Extended Reach to Peering
 - Convert ports to LACP, add bundle members
 - AS-SETs and Route Limit updates
- When can you do it?
 - End of August – Alpha Launch
 - Config generated magically, still checked and applied by humans – expect small delays for now, whilst we iron out any bugs – Please submit all changes in portal, and email / call to book a time!

Portal – Network Automation

Migrate Service to New Port

Complete this form to request a migration to an existing port you own

Peering: peering
 peering_inZy3sh Live Primary Peering

Service Port: Test Port 3 Exchange: DEV-IX [View](#)

VLAN: 123 10 Gbps

\$0.00 AUD AS7606

New Port *

New VLAN *

New MAC Address *
Please use your routers Layer 3 MAC Address. This must be unique.

This feature is currently in Beta. Each request is manually checked and approved by one of our network engineers to ensure accuracy and validity of the automated change. As such there may be a longer delay between submission and actioning of your request. If you require the change to be completed ASAP, please call our support desk on [+61892004980](tel:+61892004980).

Convert port to LACP bundle

Complete this form to request conversion to LACP bundle before ordering additional ports.

Test Port 3
 port_8EFKpDk Live [View](#)

NextDC S1 (Development IX)- 4 Eden Park Drive 1 x 10 G \$350.00 AUD Allocated

⚠ An outage is required to convert this port to an LACP bundle. When you submit this request your port will be drained using BCP214 compliant filters, LACP enabled and then the BCP214 filters removed. During the Network Automation Beta Period, these changes will not happen automatically. A member of the IAA team will be in contact with you to arrange a suitable time for this change to occur once you submit this change request.

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Agreement I agree to the above warning and wish to proceed with this change to enable LACP on this service.

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Add Ports to LACP Bundle

Complete this form to request additional switch ports on LACP bundle.

Test Port 3
 port_8EFKpDk Live [View](#)

NextDC S1 (Development IX)- 4 Eden Park Drive 1 x 10 G (LACP) \$350.00 AUD A

Number of Ports * OLD MRC: \$350.00
 NEW MRC: \$1,400.00

Add additional ports at the same speed to your Port service. This option will make changes to the billing of this service. An estimate is provided upon change

i By submitting this request you agree to any billing changes applicable to your service. There is a 7 day cross-connect grace period before the new billing will commence. Once ports have been assigned to your service the relevant LOA documents will be sent to your email and the automatic configuration will be applied to your service.

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