# AYMAROF SEISMIC PROPORTIONS

DUG TECHNOLOGY

FY2024 INVESTOR PRESENTATION | 22 AUGUST 2024



## Who we are

DUG is an ASX-listed tech company that provides innovative processing and storage solutions to leverage big data.

DUG's numerical scientists develop technology and deploy expertise using software and high-performance computing (HPC) for real-world applications.

Founded in Western Australia in **2003** 

Offices in **Perth** (HQ), London, Houston, Kuala Lumpur and Abu Dhabi

>45 petaflops data-processing power

270+ employees

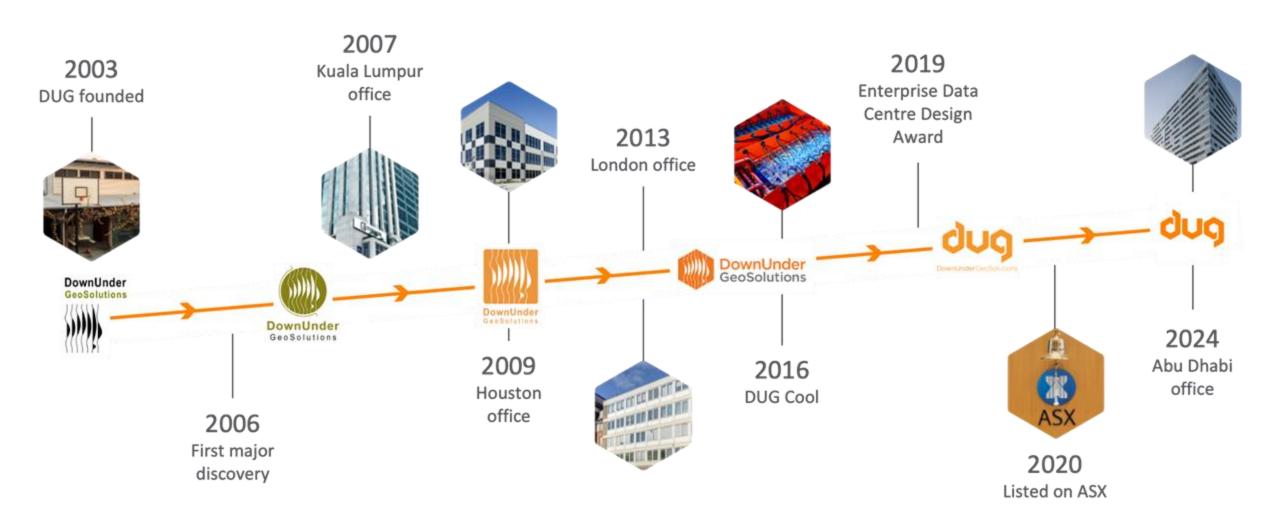
Diverse patent portfolio

>52 petabytes data-storage capacity



## Our 21-year journey





## What we do





#### **Services**

- Multi-parameter FWI Imaging
- Seismic data processing
- Data science & management



#### **Software**

- Analytic software development
- Algorithms and optimisation
- Big data processing and visualisation
- DUG Insight in 35 countries



## High Performance Computing (HPCaaS)

- o Powerful, bare-metal compute & storage
- Complete, integrated HPC environment
- Patented DUG Cool immersion technology
- Design, own, operate some of the largest supercomputers on Earth
- Big data processing supported by experts

## Key markets





A leading service provider for 21 years. Currently the primary driver of revenue and earnings.

DUG's technology helps clients make more timely, well-informed, operational decisions. DUG's products and services have contributed to numerous significant discoveries.



Enterprise

Increasing demand for HPC from industries with proliferating data.

DUG has established agreements with numerous organisations (education, research, applied science) to support their data processing and storage needs.



National Security & Space

Actively progressing opportunities by leveraging numerical data, software, and HPC capabilities developed while servicing the oil & gas industry.

## Global footprint





## Our ambition

At the forefront of technical excellence and innovation



Global leader in data processing, storage, visualisation and management



World-class, sustainable supercomputing technology



Leverage expertise in applied data science to realise opportunities in emerging markets



Continued focus on R&D to foster innovation





# FINAMCIALS





**SERVICES WINS** 

US\$67.4 million

↑ 35% vs FY23

UNDERLYING EBITDA<sup>1</sup>

US\$23.2 million

BITDA1

US\$16.6 million

↑ 54%<sup>1</sup> vs FY23

**REVENUE** 

US\$65.5 million

1 29% vs FY23

SERVICES ORDER BOOK AS AT 30 JUNE 2024

US\$36.5 million

↑ 31% vs 30 June 2023

<sup>&</sup>lt;sup>1</sup> Reported EBITDA of US\$16.6 million, up 10% vs FY23. Underlying EBITDA of US\$23.2 million excludes third party compute costs of US\$6.6 million, necessary to fulfil customer orders whilst compute upgrades were delivered and commissioned

### Profit and Loss



- Revenue increased by 29% driven mainly from Services. Kuala Lumpur revenue grew by 112%. Houston remains the largest contributor to group revenue. MP-FWI Imaging revenue comprised ~33% of the total revenue in FY24
- Increases in employee benefit costs were controlled relative to revenue increases due to operating efficiencies and lower consulting time on MP-FWI Imaging projects compared to traditional processing
- Other operating costs include third party compute costs of US\$6.6 million, necessary to fulfil customer orders whilst awaiting the delivery of new compute<sup>2</sup>
- Excluding the cost of third party compute costs, Underlying EBITDA increased 54% in FY24, lifting the Underlying EBITDA margin to 34%
- Depreciation and amortisation costs increased due to new computers and ancillary hardware

US\$ millions	FY24 <sup>1</sup>	FY23 <sup>1</sup>	% Change
Revenue			
Software	7.4	6.6	12%
Services	54.7	40.3	36%
HPCaaS	3.4	4.0	(15%)
External Revenue	65.5	50.9	29%
Other income	2.8	2.5	12%
Employee benefits	(30.4)	(27.9)	(9%)
Other operating costs	(21.3)	(10.5)	(103%)
EBITDA	16.6	15.1	10%
EBITDA margin	25%	30%	(5%)
Underlying EBITDA	23.2	15.1	54%
Underlying EBITDA margin	34%	30%	4%
Depreciation and amortisation	(7.3)	(6.4)	(14%)
EBIT	9.3	8.6	
Finance expense	(1.3)	(1.2)	(8%)
Net profit before tax	8.0	7.5	
Net profit after tax	3.3	4.9	

<sup>&</sup>lt;sup>1</sup> Numbers are rounded and may not add to sub-totals

<sup>&</sup>lt;sup>2</sup> Third party compute costs ceased following delivery of new compute - refer to ASX announcements titled "New compute delivered and finance arrangements concluded" dated 10 July 2024 and "Update regarding new compute" dated 2 February 2024

## Balance Sheet



- Increase in Fixed Assets due to significant investment in compute and ancillary hardware
- Net assets mainly improved as a result of profit for the year, repayment of loan funded shares and increase in property, plant and equipment.
- Net debt of US\$14.5 million consists of amounts due under the asset finance facility and CBA term debt, totaling \$23.9 million less cash and cash equivalents of US\$9.4 million<sup>3,4</sup>.
- CBA term debt of US\$1 million fully repaid on 1 July 2024, subsequent to year end
- Contract assets have increased by US\$1.7 million from large services contracts billed on milestone completion

	i	
US\$ millions	FY24 <sup>1</sup>	FY23 <sup>1</sup>
Current Assets		
Cash and cash equivalents	9.4	8.0
Trade and other receivables	9.3	6.6
Contract assets	4.3	2.6
Other	0.8	1.2
Total Current Assets	23.8	18.4
Non Current Assets		
Property, plant and equipment	44.0	17.8
Right of use assets and other	12.3	10.9
Total Non Current Assets	56.3	28.7
Total Assets	80.1	47.1
Current Liabilities		
Trade and other payables	7.6	6.5
Loans and borrowings	1.1	2.8
Contract liabilities	2.2	1.6
Lease liabilities	9.5	1.8
Provisions	5.1	2.4
Total Current Liabilities	25.5	15.1
Non Current Liabilities		
Loans and borrowings	0.1	-
Lease liabilities	24.4	10.9
Provisions	0.1	0.1
Total Non Current Liabilities	24.6	11.1
Total Liabilities	50.1	26.2
Net Assets	30.0	20.9

<sup>&</sup>lt;sup>1</sup> Numbers are rounded and may not add to sub-totals

<sup>&</sup>lt;sup>2</sup>Refer ASX Announcement dated 10 July 2024 "New compute delivered and finance arrangements concluded"

<sup>&</sup>lt;sup>3</sup>An increase of US\$4.1million in Non Current Assets and US\$5.3 million in borrowings will be reported in Q1FY25 relating to part of 1,500 AMD EPYC<sup>TM</sup> Genoa<sup>2</sup> machines delivered and funded subsequent to year end <sup>4</sup>Excluding lease liabilities for properties and global networks

## Cash Flow



- Strong cash generation
  - Non-cash EBITDA items include government grants for R&D expenditure in Australia
- Financing cash inflows of US\$19.8 million included \$24.4 million funding for asset finance, debt repayments and deposits for new asset finance.
- During the period, US\$31.3 million was invested into capital expenditure mainly for HPC compute, storage and ancillary hardware to support DUG's services projects.

US\$ millions	FY24 <sup>1</sup>	FY23 <sup>1</sup>
Cash flow from operating activities		
- EBITDA	16.6	15.1
- Movement in working capital	(2.4)	0.9
- Non-cash items in EBITDA	(1.9)	(2.3)
- Net interest income and tax	(0.2)	(0.3)
Total net cash flows from operating activities	12.1	13.4
Cash flows from financing activities		
<ul> <li>Proceeds from borrowings &amp; asset leases</li> </ul>	24.4	0.8
<ul> <li>Net repayment of borrowings</li> </ul>	(1.8)	(2.6)
- Net repayment of leases	(6.1)	(1.9)
- Financing costs	(1.7)	(1.2)
- Proceeds from employee loan funded share plan	5.0	-
Total net cash flows from financing activities	19.8	(4.9)
Cash flows from investing activities		
- Purchase of assets	$(31.3)^2$	(3.1)
<ul> <li>Capital grant income received</li> </ul>	0.9	-
- Disposals of assets	-	0.1
Total net cash flows from investing activities	(30.4)	(3.0)
Opening cash balance	8.0	2.7
Net cash flows	1.5	5.5
Effect of foreign exchange	(0.1)	(0.2)
Closing cash balance	9.4	8.0

<sup>&</sup>lt;sup>1</sup> Numbers are rounded and may not add to sub-totals

<sup>&</sup>lt;sup>2</sup>\$US\$31.3 million of assets purchased includes purchase of new compute (US\$24.9 million), purchase of storage (US\$2.7 million), purchase of network hardware (US\$1.6 million) and other hardware (US\$2.1 million)



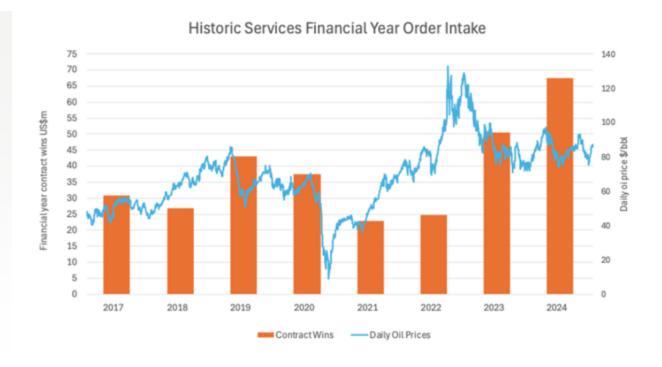


## **FY24 Services**



#### Revenue: US\$54.7 million ↑ 36%

- Record high revenue for the year following a record services order intake in FY24
- Sales presence in UAE since H1FY24
- Houston office a strong contributor with revenue of US\$30.3 million (个20%), growth driven from a number of projects in the Middle East and with domestic US clients
- Record Services projects wins awarded during FY24 of US\$67.4 million
- MP-FWI Imaging revenue of US\$18.1 million,
   ~33% of services revenue in FY24

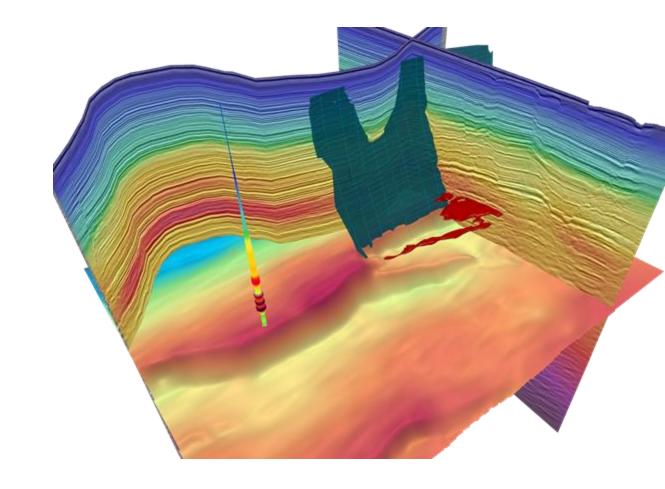


## FY24 Software



#### Revenue: US\$7.4 million ↑ 11%

- Recurring revenue underpins overall growth
- Top three software clients account for >US\$1.4 million revenue per annum, contract terms from 3-5 years
- DUG's software continues to be evaluated by leading global oil and gas companies

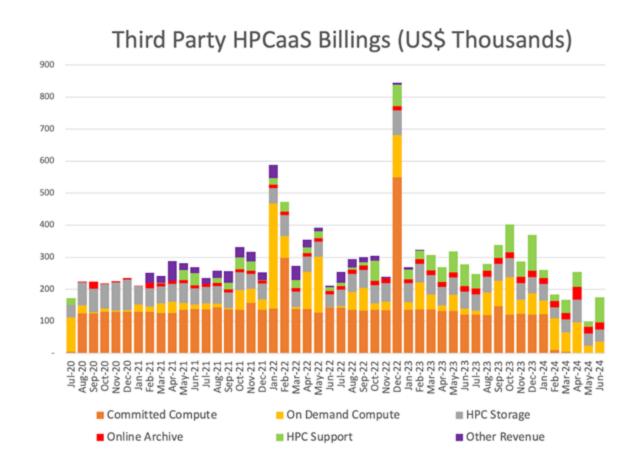


## FY24 HPCaaS



#### Revenue: US\$3.4 million ↓ 16%

- Signed new A\$500k deal with Curtin Institute of Radio Astronomy (CIRA) in early FY25
- Dedicated DUG Nomad business unit to accelerate rollout of the product line in FY25 and beyond
- DUG Cool tank sale in the year to BP Castrol
- ISO 9001 and ISO 27001 compliant



## Deep Client Relationships



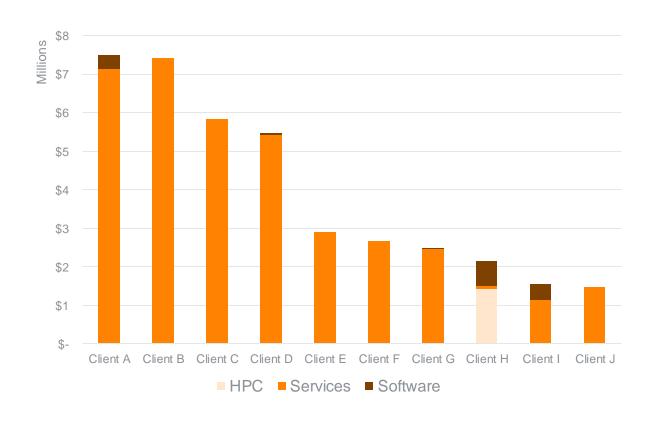
Our top 10 clients accounted for 60% of revenue for the financial year

Continue to foster long relationships with large clients, across multiple product lines

Relationships continue to lead to larger, longerterm projects with major clients

Important recent client wins supplementing long-standing relationships

Top 10 customers by FY24 revenue





## BUSINESS UPDATE

## Middle East Update



- The Middle East continues to be the largest producing oil region globally in 2023 (1)
- DUG has commissioned a new office in Abu Dhabi
- Building pipeline from customers based in Middle East
- First contract won from major client in Middle East
- Multiple software evaluation trials underway with local producers

The World's Biggest Oil Producers in 2023 Crude Oil Production (Million barrels per day) Other 22.8 Canada 4.6 Russia 10.1 Kuwait Saudi Arabia Source: U.S. Energy Information Administration, International Energy Statistics

<sup>&</sup>lt;sup>1</sup> Image sourced from: <a href="https://elements.visualcapitalist.com/the-worlds-biggest-oil-producers-in-2023/">https://elements.visualcapitalist.com/the-worlds-biggest-oil-producers-in-2023/</a> source of U.S. Energy Information Administration, International Energy Statistics

## DUG Cool agreement with BAC



- Signed an exclusive licensing agreement with Baltimore Aircoil Company (BAC) over DUG's immersion-cooling technology (DUG Cool)
  - Grants BAC an exclusive and worldwide licence to use DUG's patent rights and know-how
  - Includes the right to use, manufacture, market and sell the Licenced IP and will be used by BAC to manufacture and sell immersion cooling tanks
- DUG to earn the royalties of up to 5% of net sales¹ until the patent expiry date in 2036
- DUG retains the ability to utilise the Licenced IP for DUG's own use and for use in the Company's DUG Nomad product suite



BAC is the global leader in cooling solutions with over 80 years of experience serving the HVAC, Industrial, and Refrigeration industries.

Since 1938, BAC has been creating innovative sustainable products and solutions for the most essential and demanding environments on earth. DUG's technology helps clients make more timely, well-informed, operational decisions.

<sup>&</sup>lt;sup>1</sup> Net sales refers to the sale price paid to BAC excluding freight, tax, and other ancillary services associated with the sale of the immersion cooling tanks. 50% of royalty subject to DUG providing ongoing technical assistance to aid commercialisation

## **DUG Nomad**



- New business unit formed from July 2024 to commercialise this technology
- Mobile, modular data centre solution that puts HPC where you need it – DUG Cool in a container
- Forged from decades of experience—an innovative combination of tried-and-tested hardware, software and infrastructure
- DUG's patented, immersion-cooling technology, DUG
   Cool enables compute and storage capabilities that are both sustainable and reliable
- All components, including the cooling infrastructure, are contained within a single secure, robust enclosure







## Outlook



- FY24 results demonstrate outstanding organic growth, driven by the Services segment. The momentum is expected to continue into FY25
- The Company is well placed for accelerated momentum into FY25, underpinned by commissioning of an office in UAE
- DUG starting FY25 with a strong service order book of US\$36.5 million
- Strong pipeline of Services work, particularly in the Middle East, which is expected to be the Group's leading region
- MP-FWI Imaging uptake is gathering pace with 33% of FY24 revenue delivered through MP-FWI Imaging projects. Companies continue to be excited with continued improvement in imaging results. DUG has added Elastic MP-FWI Imaging to the product list for this financial year
- Investment in new computer hardware in FY24 underpins the compute requirement for MP-FWI Imaging projects
- New business unit formed from July 2024 to commercialise DUG Nomad technology. Momentum building in DUG Nomad solution
- DUG does not intend to issue earnings guidance for FY25

## Disclaimer



This presentation has been prepared by DUG Technology Ltd ("DUG") based on information available as at the date of this presentation. The information in this presentation is provided in summary form and does not contain all information necessary to make an investment decision. Reliance should not be placed on the information or opinions contained in this presentation. An investor must not act on the basis of any matter contained in this presentation but should make its own assessment of DUG as part of its own investigations.

This presentation has been provided for general information purposes only. It does not constitute an offer, invitation, solicitation or recommendation with respect to the purchase or sale of any security in DUG, nor does it constitute financial product advice or take into account any individual's investment objectives, taxation situation, financial situation or needs.

Although reasonable care has been taken to ensure that the facts stated in this presentation are accurate and that the opinions expressed are fair and reasonable, no representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this presentation. To the maximum extent permitted by law, neither DUG, nor any of its officers, directors, employees and agents, nor any other person, accepts any responsibility or liability for the content of this presentation including, without limitation, any liability arising from fault or negligence, for any loss arising from the use of or reliance on any of the information contained in this presentation or otherwise arising in connection with it. This disclaimer also extends to all and any information and opinions contained in, and any omissions from, any other written or oral communications transmitted or otherwise made available to the recipient in connection with the opportunity outlined in this presentation and no representation or warranty is made in respect of such information.

The information presented in this presentation is subject to change without notice and DUG does not have any responsibility or obligation to inform you of any matter arising or coming to their notice, after the date of this presentation, which may affect any matter referred to in this presentation. The cover image is illustrative only.

This presentation may contain certain forward-looking statements that are based on DUG's beliefs, assumptions and expectations and on information currently available to DUG management. Such forward looking statements involve known and unknown risks, uncertainties, and other factors which may cause the actual results or performance of DUG to be materially different from the results or performance expressed or implied by such forward looking statements. Such forward looking statements are based on numerous assumptions regarding present and future business strategies and the business, economic and competitive environment in which they operate in the future, which are subject to change without notice. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. To the full extent permitted by law, DUG and its directors, officers, employees, advisers, agents and intermediaries disclaim any obligation or undertaking to release any updates or revisions to information to reflect any change in any of the information contained in this presentation (including, but not limited to, any assumptions or expectations set out in the presentation).

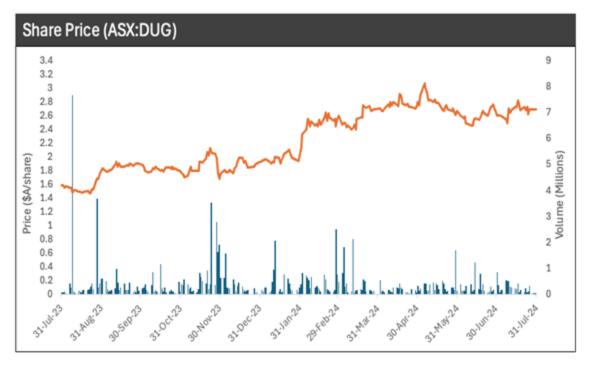
All amounts are in United States Dollars (US\$) unless otherwise stated.





## **Corporate Summary**





Board of Directors	
Frank Sciarrone	Non-Executive Chairman
Matthew Lamont Ph.D.	Managing Director
Louise Bower	Non-Executive Director
Mark Puzey	Non-Executive Director

Corporate Structure	Units	
Share Price (as at 21 August 2024)	A\$/sh	2.92
Shares on Issue	#m	118.1
Market Capitalisation	A\$m	344.9
(+) Financial Debt¹ (as at 30 June 2024)	A\$m	35.8
(-) Cash at Bank <sup>1</sup> (as at 30 June 2024)	A\$m	14.1
Enterprise Value	A\$m	366.6

Substantial Shareholders (as at 3 July 2024)		
Mr Matthew Lamont	18.2%	
Regal Funds Management Pty Ltd	15.6%	
Perennial Value Management Limited	9.7%	
Thorney Investment Group	5.1%	
Top 20 Shareholders	73.2%	

<sup>&</sup>lt;sup>1</sup>Exchange rate of 0.6669 applied, numbers correspond to audited figures. Excluding lease liabilities for properties and global network

## Better and greener shipbuilding



"With the support of HPC provider DUG Technology, we can reduce the timeframe for hull form optimisation in conjunction with computational fluid dynamics by an order of magnitude."

Max Haase

Development Hydrodynamics Specialist at Austal



Ship design specialists at Austal perform resourceintensive computational analyses to improve the efficiency and performance of defence and commercial vessels

Austal required quick access to different hardware and an efficient, flexible HPC platform to meet its increasing computational demands, while reducing its greenhousegas emissions

DUG provided tailored support and bespoke, codeoptimisation expertise, ensuring Austal's software and workflows could leverage DUG's HPC Cloud

With DUG's support, Austal has developed an advanced artificial intelligence toolset, DeepMorpher, helping the company's Australia-based designers to explore broader design spaces whilst significantly reducing resource requirements for complex hull optimisation routines



## Out-of-this-world processing of astronomy data



DUG's green HPC was credited for lowering emissions

ICRAR published a paper two years ahead of schedule, with 100+ citations



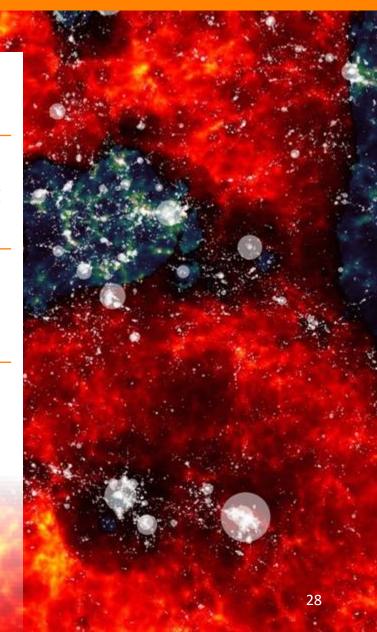


The Square Kilometre Array (SKA) Project is one of the largest international scientific research projects in history

The Murchison Widefield Array (MWA) telescope had amassed a backlog of data that was being processed using the Pawsey Supercomputing Centre

DUG HPC experts took two weeks to optimise the academic code used to process the MWA data and achieved run-times that were 125x faster

DUG's support and HPC expertise allowed the ICRAR team to process their data backlog in three hours, using just a fifth of DUG's supercomputer in Perth



## Sharpening Earth observation capabilities



"We have been thoroughly impressed by the speed and scale at which DUG's HPC offering has been able to support our agriculture analytics services. Dataprocessing tasks which took us weeks in the past can now be completed in hours. This is a gamechanging development for us."

Venkat Pillay
CEO of LatConnect60

Smart-satellite provider LatConnect 60 is working to promote a subscription-based monitoring service to enhance crop management

To sustain a large-scale deployment of the service, LatConnect 60 required a tailored, cost-effective and efficient solution

DUG provided the required compute capacity and an optimal software environment for LatConnect 60 to run its workflows and analyses





## Supercharging medical research at Perkins



Perkins said:
"Trusting the
technology to the
experts at DUG, we
can now get back to
our #1 priority —
saving lives."



Researchers at the Harry Perkins Institute of Medical Research (Perkins) must constantly develop new algorithms and methodologies to keep pace with the rapid evolution of bioinformatics

Perkins required a fully supported HPC system designed to let them store, process and analyse colossal amounts of genomic data in their unconventional ways

DUG provided Perkins researchers with tailored HPC expertise and support, ensuring their workflows could leverage state-of-the-art processors and storage systems such as VAST Data's massive scalable storage system that can service any I/O load

DUG's bespoke HPC solution gave Perkins researchers quick and easy access to their huge datasets without computational restriction



## Outsmarting bushfires with Al



Clear, demonstrable pathways and deployable tools for future use by fire experts and first responders



The Frontier Development Lab AusNZ approached DUG to provide the HPC service and support for Data Quest 2020—a research sprint incorporating artificial intelligence (AI) into firefighting

Predicting and preventing bushfires are arduous tasks due to the complexity of the processes involved, coupled with obsolete tools that require manual input

DUG supplied HPC resources and data science expertise, enabling the researchers to efficiently test AI-powered systems by leveraging **terabytes of satellite data** 

A number of innovative AI solutions for bushfire prevention and management were successfully developed



## Unlocking new solutions for neurodegenerative diseases dug



Some parts of the workflow were up to 60 times faster!



Biotech company GenieUs Genomics (GenieUs) developed DiGAP<sup>TM</sup>, a bioinformatic tool for analysing whole-genome sequencing

GenieUs faced long processing times for each sample, and the large size of datasets made unit testing difficult—resulting in a backlog of samples that were impeding research efforts

DUG provided GenieUs researchers with tailored HPC expertise and workflow-optimisation support, enabling the dynamic allocation of compute nodes and storage as demand required

DUG also crafted a compliant environment that supported continuous integration with GenieUs' preferred software

With DUG's support, GenieUs researchers optimised the use of HPC resources for their specific needs—improving the speed, scale, and efficiency of their computational workflows

## Better healthcare for Indigenous Australians



investigating how the genetic architecture of Indigenous Australians relates to the incidence of type-2 diabetes—driving the improvement of healthcare outcomes for the community

TELETHON

INSTITUTE

Computational biologists at Indigenous Genomics (IG) at the Telethon Kids Institute are developing novel healthcare solutions for Indigenous Australians, which entail the analysis of large, complex and sensitive datasets

The IG research group required a new HPC cloud solution that could deliver both secure data management and rapid processing, while allowing collaboration with research partners

DUG's HPC Experts optimised their workflows so they could scale up with DUG HPC Cloud

DUG's powerful, bare-metal compute and storage delivered efficiency, security and privacy

In one study, DUG's tailored HPC solution enabled the IG group to process 1287 whole genomes in 140 hours—a workload that was historically taking many weeks to complete

- dug.com
- facebook.com/TeamDUG
- in linkedin.com/company/teamdug
- twitter.com/Team\_DUG
- youtube.com/DugeoOnline
- investor@dug.com
- +618 9287 4100



