

AARON CHEAH (CDCE, CTIA, CDFOM)

7, Jalan Mahligai 5C/KU2, Bandar Bukit Raja, 41050 Klang

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PERSONAL SUMMARY

Head of Department (CLS and Facility) reporting to Group CTO with vast experience and thorough understanding across a broad range of data centre infrastructure, overseeing the planning and operation with proven track records to resolve data centre related matters in a fast, effective and efficient manner. Ability to strategize data centre planning roadmap throughout the data centre lifecycle and execute it thereafter. As a concise communicator, great communication with vendors, internal and external stakeholders as well as top management. As a performance driven technology enthusiast; looking to take on new and exciting challenges with a successful and dynamic company that has a culture of respect, challenge and innovation to maximize contributions

CORE COMPETENCIES

- Establishing and maintaining good relationships with senior management and stakeholders
- Ensure technical architecture on infrastructure projects implementation are in line with data centre standards by consistently attending certified trainings and conferences
- Heading a team of professionals to ensure seamless operations of data centre services
- Able to provide leadership in teams and build cohesive relationship with all level of staffs
- Ability to recognize process shortfalls and make necessary changes to improve efficiencies by engaging stakeholder
- Ambitious self-starter and innovator, eager to put my knowledge and research to good use
- Ability to quickly expand scope of responsibility
- Capable communicator, able to think strategically, manage budgets, and be an effective team leader
- Computer savvy, highly proficient producing presentations, schedules, budgets and financial models on line, ability to communicate effectively
- Excellent collaborator: capable of working with others to find solutions to complex problems
- Timelines and commitment with emphasis on reliability, quality and service
- Ability to align, motivate and lead a team including creating accountability
- Attention to detail, a drive to excel and a strong sense of responsibility

PROFESSIONAL WORKING EXPERIENCE

TIME dotCOM Bhd. (TDC)

Head, CLS and Facility

Lead, TDC and CLS Data Centre

Lead, Data Centre

Nov 2021 – Present

Mar 2019 – Nov 2021

June 2016 – Mar 2019

- Heading TIME Malaysia Data Centre Facilities Planning and Operations:
 - TIME Glenmarie HQ Data Centre
 - Cable Landing Station (CLS) Cherating, Kuantan
 - Cable Landing Station (CLS) Kuala Muda, Penang
 - TIME common rooms and cabin sites (400+ sites across Malaysia)
- Design and implement Civil, Mechanical and Electrical infra deployment to new and existing TIME sites, Data Centres and Cable Landing Station for the setup of new Network or expansions (OLT, DWDM, IP Core, Cloud Solutions, Firewall and others) and IT team (New Server Clusters and DR) using latest trends and technologies and appropriate setup
- Preparing Tender Strategy, Tender Documents for procurement process and presentation to Executive Directors on award approvals during Investment Committee meetings
- Executing all aspects of data centre facilities management and operations including maintenance and repairs of all equipment and systems supporting a 24x7 Data Centre operations to achieve 99.999% uptime
- Administration of Uninterruptible Power Supply System (UPS), Switch Mode Rectifier System (SMR), Precision Air-conditioners (PAC), Server Power Management (SPM/IPDUs), Fire Suppression System, Water Leak Detection System, CCTV and Door Access system, Internal Structured Cabling, Space & Capacity Planning
- To provide efficient, effective technical support to both internal and external customers, Telco's vendor, suppliers, contractors with the objective of coordinating, managing, solving problems in a minimal time frame and providing post-sales technical support.
- To lead and plan on project implementation, management and troubleshooting of critical DC infrastructure
- To create technical documents (SoW, operational guide, infrastructure documentation, etc)
- To be updated with latest DC infrastructure technologies and products by regularly participating in new product education and training
- Provide guidance and implementation for hardware and upgrade in DC
- Approval of all change management/planned events in DC
- Technical competent to detect and identify the defects and deficiencies which includes isolation, troubleshooting, restoration, rectification, of DC infrastructure services.
- Implementation of SOP (Design, Implementation Operations and Retirement that ensures the highest operational effectiveness
- YoY AOP CAPEX and OPEX Planning
- Auditing of TDC sites and corrective action plans and compliance to regulation (ISMS, SIRIM, PCIDSS, QMS and NRA)
- Supervises all construction activity and installation, in coordination with internal and external resources to ensure system design, installation and testing adhere to operational standards. Witness testing of all equipment during commissioning and validate sequence of operations and receipt of all operational documentation
- Live monitoring of Power Supply consumption to ensure it does not exceed threshold levels to avoid over-loading and to trigger for upgrade
- Co-ordination of interdepartmental roles and responsibilities
- Serve as primary point of contact in managing stakeholders from System Platform, Network Operation, Network Planning on Space Management, and Equipment Management (Power and Cooling)

- Coordinates, oversees and/or manages repair and maintenance work assignments performed by technicians, vendors and contractors performing maintenance
- Participate in short- and long-range planning, policy formation and strategic decision-making; Provide on-site supervision of events and activities, often at late hours and/or on the weekends
- Monitor Data Centre auxiliary equipment to ensure it is in operational order at all time
- Immediate on-site corrective activities to address live-alarm alerts
- Manages Data Centre maintenance contract support and services renewal.
- Manages Data Centre safety and security measures
- Review, revise and implement new Standard Operation Procedures to optimize operations efficiency
- Installation, troubleshooting and management of structured cabling and raceways starting at the service entrance out to individual server cabinets
- Data Centre space management to include hardware installation and removal
- Management of Data Centre electrical systems and sub-systems
- Construction and update Data Centre documents comprises of As-Built Drawings such as Electrical Single Line Drawings, Layout Plans, etc.
- Internal Consultant/Head of Project Manager for all facilities and all Data Centre Design, Implementations and Built Projects
- Mentor individuals and impart knowledge to ensure employees can move up in the organization

Key Project List

- **Nationwide Centralized Security System**
 - CCTV and Card Access System deployment to Data Centre and Remote Sites
- **Nationwide Facility Alarm Remote Monitoring System**
 - To move away from vendor dependent proprietary solution with In-House Open Source Solution
 - >50% cost saving initiatives with full customization of monitoring features monitored by 24x7 SOC
- **Nationwide Facility Revamp**
 - Reclassification of sites by importance (Network Tier 1 to Tier 3 and others)
 - Redesign availability and redundancy for the above
 - Management presentation for budget planning and approval
- **Full-turnkey Project for Construction of New CLS from Greenfield**
 - Technical Project Manager to oversee End-to-End of the project from Planning and Design from greenfield
 - Work with acquisition team on Land Acquisition
 - To house STRAITS Submarine Cable System and Backhaul ILA sites to Central
 - Tier III Infrastructure to meet customer demands
 - To work out tender documents, technical criteria, evaluation and presentation to Investment Committee
- **Full-turnkey Project for Construction of New CLS from Greenfield**
 - Technical Project Manager to oversee End-to-End of the project from Planning and Design from greenfield
 - Work with acquisition team on Land Acquisition
 - To house IAX Submarine Cable System and Backhaul ILA sites to Central
 - Tier III Infrastructure to meet customer demands
 - To work out tender documents, technical criteria, evaluation and presentation to Investment Committee

- **EDGE Network BtoBE Infrastructure readiness**
 - Infrastructure readiness for 186kW in CLS Cherating to cater for New Submarine Cable System and 30 Cabin ILA Sites from Eastern to Southern Peninsula Malaysia
 - First in Malaysia to have deployed HVDC 400VDC solution
 - Tier III Infrastructure Upgrade in CLS Cherating to meet customer demands
 - To prepare 1,600 sqft Data Centre White Space to house SLTE, PFE, DWDM equipment
- **Tier III Infrastructure Upgrade**
 - Upgrade existing TIME Glenmarie Data Centre power system to Tier III to support the criticality of TIME network for 99.999% availability
- **Infrastructure Upgrade**
 - Upgrade for AAE-1 expansion (CLS Penang)
 - Upgrade for APG expansion (CLS Cherating)
- **SKR1M, CLS Cherating, Kuantan**
 - Sistem Kabel Rakyat 1 Malaysia ("SKR1M"). SKR1M will link Peninsular Malaysia with Sabah and Sarawak.
 - Internal Consultant/Project Manager for SKR1M room implementation that requires new server room to house NEC's Racks consisting of AC and DC supply of initial 4kW and 34kW respectively.
 - TIME representative for User Acceptance Test and signing off the Certificate of Completion.
- **CLS Penang Data Centre**
 - Internal Consultant for the implementation and readiness of data centre facilities in CLS Penang for AAE-1 Submarine Cabling Equipment.
 - TIME representative for User Acceptance Test and signing off the Certificate of Completion.
- **Project CCTV, Glenmarie Data Centre**
 - Implementation of new IP-based CCTV System to address the security and ISMS needs.
- **Project Rack-Mount Static Transfer Switch (STS), Glenmarie Data Centre**
 - To mitigate recent March 2016 incident on AC Power Loss to Single Source Production Equipment.
 - To be in line with Tier III upgrade plan to have 2N redundancy and two active independent power paths to STS to support single source equipment.
- **New TIME Call Centre Renovation Project, Glenmarie Main Building**
 - Assigned as the Project Manager / Internal Consultant for this project
 - To revamp the existing TIME Cabin Switching Room into a new Call Centre with a total build- up area of 6000sq.ft.
- **BtoBE infrastructure readiness, Cable Landing Station, Cherating**
 - Tier III infrastructure upgrade in CLS Cherating
 - To prepare 1,600 sqft. Data Centre White Space to house SLTE, PFE, DWDM equipment

Powerware Systems Sdn.Bhd.

Senior Data Centre Consulting Engineer

May 2014 – June 2016

- Assist Sales Department in Site Visits and Understanding Client's Requirements in order to prepare Data Centre Solutions, proposals and fulfill tender submissions
- Constantly attending courses to be updated with the latest technology and latest products to be implemented into solutions
- Liaise with suppliers and contractor during presales and post sales
- Sourcing new suppliers and vendors
- Handling both Mechanical & Electrical LV Design
- Prepares Bill of Material (BOM) with prices to support sales department
- Design layouts with proper compartmentalization for a given white space using fire-rated partitions, normal partition complete with door sizing.
- Raised floor design (Comprises of building data centres above the raise floor for the purpose of cold air being supplied underneath the raised floor as well as electrical cables running underneath the raised floor)
- Design Precision Cooling System for Data Centre (Direct-Expansion type, water-cooled type and Chiller System)
- Design & determine piping routes for Air-conditioning system
- Electrical design for MV from 11kV – 415V Transformer system
- Electrical Schematic Diagram Design of LV (Low Voltage) System from Transformer till PDU to end equipment stage with circuit breakers sizing, electrical leak circuit breakers, earth fault, overcurrent protection relays, TVSS (Transient Voltage Surge Suppressors) and cable type & sizing.
- Sizing & Selection of Uninterruptible Power Supply (UPS) System for IT Load
- Electrical Schematic Diagram to be submitted to switchboard manufacturer for fabrication
- Design & determine electrical cable routings
- Generator Sizing for continuous running as a backup redundant power to the LV System
- Design Water Leak Detection system
- Design HSSD (Highly Sensitive Smoke Detection) or VESDA (Very Early Smoke Detector Alert) system
- Selection of Clean Gas Agents for Fire Suppression System
- Liaising with our hardware team on our very own Environmental Monitoring System (EMS) and Data Centre Infrastructure Management System (DCIM) for proposals
- Prepare technical write-up and presentation slides for proposed solutions
- Conduct full presentation to client
- Conduct site inspections during project implementation stage
- Rectify and resolve ad-hoc issues pertaining design during project implementation stage
- Participates in regular site meetings during project implementation stage

Key Project List

- **ACGT, Technology Park Malaysia**
 - Refurbishment and making good of existing Scope International's Data Centre including new electrical LV and cabling system.
- **Unitab Medic, Jalan Kampung Pandan**
 - Design and Build a New Server Room to house six racks complete with raised floor access system, redundant precision cooling system, LV switchgears, electrical LV and

cabling system, single UPS source, FM200 fire suppression system, very early smoke detection system, water leak detection system, generator set as a backup power source, monitoring system, and security systems.

- **MYTV, Cyberjaya**

- Design and Build a Tier III Broadcast Centre including renovation works complete with raised floor access system, 1000A LV Switchgears, active harmonic filters, Intelligent PDU, Static Transfer Switch (STS), electrical LV and cabling system, IG55 fire suppression system, highly sensitive smoke detection system, water leak detection system, redundant generator system, environmental monitoring system, synchronized UPS with battery monitoring system, redundant precision cooling system, and security systems.

- **MYTV Phase 2, Cyberjaya**

- Design and Build new Office Mechanical & Electrical systems for three floors
- Design and Build a new server room complete with raised floor access system, LV switchgears, electrical LV and cabling system, comfort cooling, highly sensitive smoke detection system, fire protection system, water leak detection system, UPS system and security systems.

- **ALTEL Holdings Headquarters, Petaling Jaya**

- Design and Build new office Mechanical & Electrical systems for three floors
- Design and Build a new server room complete with raised floor access system, LV switchgears, electrical LV and cabling system, comfort cooling, highly sensitive smoke, detection system, fire protection system, water leak detection system, UPS system and security systems.

- **CIMB Data Centre, Bangi**

- Main/Lead Design Engineer for the Project
- Upgrade Existing Live Data Centre to Uptime Institute, Tier III compliant Data Centre
- Design a second electrical power path to comply with Tier III requirements
- Planning new electrical routing and power migration to the existing Data Centre
- Convert existing Printer Room to Data Centre ready space
- Enhance external physical security of the production Data Centre
- HT works and new transformers to support System A & System

Courses, Training and Conferences Attended

2020

- **AWS Technical Essential Day**
- **Huber+Suhner Data Centre Certified Network Cabling Training**

2019

- **Re-Certified Data Centre Expert (CDCE)**
- **Data Center Dynamics Conference, Singapore (DCD)**

2017

- **Certified TIA-942 Design Consultant Training (CTDC)**
 - Ability to design an ANSI/TIA-942 compliant data centre, comprehend and apply the ANSI/TIA-942 Standard requirements and guidelines
 - Align the selection of redundancy levels and infrastructure investments to the business

- requirements,
- Understand the proper intent of the ANSI/TIA-942 Standard to avoid both over- and/or under-investment
- Understand the criteria and requirements for a high-availability data centre design and how to effectively establish the data centre from the perspective of the ANSI/TIA-942 Standard
- Understand how the ANSI/TIA-942 Standard relates to various worldwide standards
- **Certified TIA-942 Internal Auditor (CTIA)**
 - Conduct an internal audit program by applying widely recognized audit principles, procedures and techniques which are aligned with the ISO-19011 auditing guideline.
 - Prepare the organization for an audit according to ANSI/TIA-942 including preparation of the required documents, resource planning and management of the audit process itself
 - Conduct an internal audit according to ANSI/TIA-942 following ISO-19011 guidelines

2016

- **Certified Data Centre Expert (CDCE)**
 - The highest certification level of data centre design roadmap and ability to analyze a given business case, perform technical evaluation of a project plan and a set of designs for the implementation of a mission-critical data centre.
- **Certified Data Centre Facilities Operations Manager (CDFOM)**
 - Ability to manage data centre facilities and operations from planning, monitoring to reporting with systematic processes.
- **Certified Basic Occupational First Aid, CPR & AED**
 - Certified First Aider with knowledge to perform CPR and the use of AED.

2015

- **Certified Data Centre Specialist (CDCS)**
 - Advance level for Data Centre Professionals on Power, Cooling, Security, and Cabling to ensure a high availability of a data centre and able to verify offers provided by vendors for correctness, effectiveness and efficiency.
- **Certified Data Centre Professional (CDCP)**
 - Certified Data Centre Designer for Power, Cooling, Security, and Cabling to ensure a high availability of a data centre
- **Schneider Electric Summit Consultant Seminar**
 - Power & Power Quality Monitoring Solution
 - Creating a reliable & secure advanced distribution management system
 - The evolution of IEC 60364-8-1 Standard
 - Hydraulic Modeling Tools for a more profitable operation of water distribution network
 - Preventing maintenance strategy for data centre

- IEC Standards and Power Factor Correction Seminar
- International English Language Testing System (IELTS) – Average 7.5

2014

- **Schneider Electric Technology Update Seminar**
 - IEC 61439-1 & 2
 - Latest breakthrough in UPS Technologies
 - Latest technology of medium voltage switchgear
 - Energy saving opportunity using intelligent building automation system
 - Power monitoring solution in supporting energy saving initiatives
 - Standards for Wiring Devices (Switches, Sockets, MCBs and RCCBs)
- Samsung AVTECH HD CCTV Seminar
- UTC Interlogix Electronic Security System & GST Fire Alarm System Seminar
- Advancetech Power ASCO ATS Technical Seminar
- Corrosion & Odour Control by Gas Phase Filtration (GPF) System Seminar
- LEGRAND Certified Training Course

Sime Darby Plantation Tower Sdn. Bhd.

Intern

Feb-Apr 2013

- Training in SD Academy on oil process
- SD Kernel Crushing Plant, Carey Island (Pipe Water Jacking Project)
- SD Kernel Crushing Plant, Carey Island (PKE Warehouse Project)
- SD Jomalina Refinery, Jalan Banting (Additional Storage Tank Project)
- SD Edible Products Limited, Boon Lay, Singapore (Demolish and Relocation Project)
- Interdepartment volleyball Champion.
- OSHA week. Attended Bomba talk on fire extinguisher and demonstration (put out fire) and we get to put out fire with the fire

Coordinator/Promoter/Ambassadors (Part-time basis)

2008-2015

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|---|-----------------|
| • Nutrition Consultant, Dumex | Jan - March 08 |
| • Customer Care Consultant, Maxis CDPU | July - Oct 09 |
| • Data Entry Staff, Fuji Xerox | Feb- March 10 |
| • Recruitment Assistant, GreyTwo Sdn. Bhd. | Apr - June 10 |
| • Men In Red Team, Shell | June - July 10 |
| • Tutor, Form 4 & 5(SPM), and IGCSE Additional Mathematics & Modern Mathematics | May 12 – Nov 19 |

ACADEMIC ACHIEVEMENTS

University of Tenaga National (UNITEN)

2010-2014

- Bachelor of Mechanical Engineering (Honours)
- Final Year Project Awards – **Most Marketable Project Award** with the title **2013** “The Effect of Sawdust-Recycle Polypropylene Ratio on the Mechanical Properties of Composite Board”

KBU International College

2008-2009

- A-Levels

Sekolah Menengah Kebangsaan Damansara Jaya

2003-2007

- Sijil Pelajaran Malaysia (SPM) - O-Levels Equivalent (6As)
- Penilaian Menengah Rendah (PMR) (6As)

Related Coursework

- Dissertation: The Effect of Sawdust-Recycle Polypropylene Ratio on the Mechanical Properties of Composite Board
- Engineering Graphics & CAE
- Principles of Programming
- Manufacturing Process Lab
- Mechanics I: Statics
- Manufacturing Processes
- Thermodynamics I
- Mechanics II: Dynamics
- Circuit Analysis I
- Numerical Methods For Engineers
- Mechanics of Materials
- Mechanics and Materials Lab.
- Mechanics of Fluids I
- Fluids Mechanics Lab
- Theory of Machines
- Mechanics of Fluids II
- Machine Design
- Machine Design & CAD Lab.
- Engineering Measurements & Lab.
- Engineering Economics

- Heat Transfer
- Heat Transfer & Applied Thermo. Lab.
- Mechanical Vibration
- Mechanical Design Process
- Electro-Mechanical Systems
- Non Destructive Testing
- Production Planning & Control
- Capstone Design

SPORTS ACHIEVEMENTS & EXTRA-CURRICULAR ACTIVITIES

Local and International Events	2003-2019
• Volleyball MSSD Petaling – 3rd Place	2003
• Volleyball MSS Selangor – 2nd Place	2004
• Volleyball MSS Selangor – 2nd Place	2006
• Volleyball MSS Selangor – 1st Place	2007
• Volleyball MSSD Petaling – 2nd Place	
• Badminton Taiwan Morning Cup – 2nd Place	2012
• Volleyball MSSD Petaling – 2nd Place	
• Volleyball University Interfaculty – 2nd Place	2013
• Badminton Masiswa – Represented UNITEN	
• Long, Short Distance Runner	
• NIKE We Run KL (10km)	
• Love PJ Run (5km)	
• Viper Challenge (21km Obstacle Challenge)	
• Standard Chartered KL Marathon (10km)	
• Adidas King Of The Road (10km)	
• 2XU Compression Run Malaysia (15km)	
• Penang Bridge International Marathon (21km)	
• Morib Triathlon (Swim, Bike, Run)	
• Newton Run (15km)	
• The Burden Run (4.7km Run + 5.3km Run with Sandbag)	2014
• NM Galaxy Road Run (12km)	
• 2XU Compression Run Singapore (10km)	
• Brooks Half Marathon (21km)	
• Malaysia Women Marathon (21km)	
• ANZAC Run Melbourne (10km)	
• Firefighter Cyberjaya Night Half Marathon (21km)	
• NM Galaxy Road Run 3 rd Series (18km)	
• Successfully hiked up Mount Amos, Tasmania.	
• Reebok Challenge, Enjoy PJ Run, 2XU Compression Run Malaysia (21km), Mini MBPJ	

Triathlon, Locks of Hope Cancer Charity Run (7km), Pacesetter Run (30km) & Penang Bridge FULL (42km) Marathon

- Certified Open Water Diver (PADI) 2015
- Mount Rinjani (2675m) 2D1N Hike , Lombok 2016
- TIME Badminton Open Championship (1st Runner Up)
- Corporate Social Responsibility Activity – Painting at the National Zoo
- Badminton Interchurch Sports Carnival – 3rd Place
- Certified Advanced Open Water Diver (PADI)
- Wreck Dived in Japanese WWII Shipwreck (Coron, Palawan)
- Mount Kinabalu 2D1N Hike, Sabah 2019
- TIME Badminton Open Championship (Champion)

High School Activities

2003-2007

- Prefectorial Board Training & Leadership Camp
- People's Park Baptist Church Camp
- Blue House Representative for Volleyball Tournaments
- Volleyball Club District and State Competition
- Bahasa Melayu Club

Leadership skills:

2003-2007

- Elected as Head of a Division in Prefectorial Board of SMK Damansara Jaya (2006-2007)
- Elected as Treasurer of PA Systems Division (2006-2007)
- Elected as President for Volleyball Club (2006-2007)
- Elected as Assistant Head Prefect (2004)
- Elected as Blue House Captain of SMK Damansara Jaya (2004)
- Scouts – Represented Malaysian Contingent to Muhibah Camporee, Thailand (2003)

Language Proficiency:

- Proficient in English, Bahasa Malaysia. (Written & Spoken)
- Dialect: Proficient in Hokkien

Computer Skills:

- AutoCAD
- Data Centre monitoring system
- Data Centre infrastructure management tool
- Computational Fluid Dynamics for Data Centre
- Microsoft Office – Word, Excel, Power Point

VOLUNTEER EXPERIENCE

2018 Election Polling and Counting Agent (PACA)	2018
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SMK Sungai Buloh

LEO Club SMK Damansara Jaya	2005
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Ti-Ratana Welfare Society

Monfort Ministry	2007
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Conduct Bible School Teaching

Orang Asli Village, Cameron Highlands	2008
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Charity Work

REFEREES

Available upon request.