

WEBINAR

Pathway to Data Center Certification

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AFCOM

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Today's Speaker



Joseba Calvo Managing Partner, EPI Americas

- CDCE® CTDC® CTIA® CDFOM® CDMS® CD RP® CITM® CDESS® (Certified Data Center Environmental Sustainability Specialist), CRUR® Auditor
- ISO 14064 (Greenhouse gases - CO2e Data Center emissions/removals), SS564 (Green Data Center), ISO 27701 (GDPR), ISO 27001, ISO 22301, ISO 20000 & ISO 50001, DCOS and TIA-942 Lead Auditor, Digital Transformation Certified Trainer
- TIA-942 Committee Member, DCOS Committee Member

Takeaways after this webinar

- How you can build a Data Center Career Plan based on competences for yourself and/or your team?
- Data Center Job Description including competences
- What is the Data Center Framework?



**THE ONLY
THING MORE
EXPENSIVE THAN
EDUCATION IS
IGNORANCE**



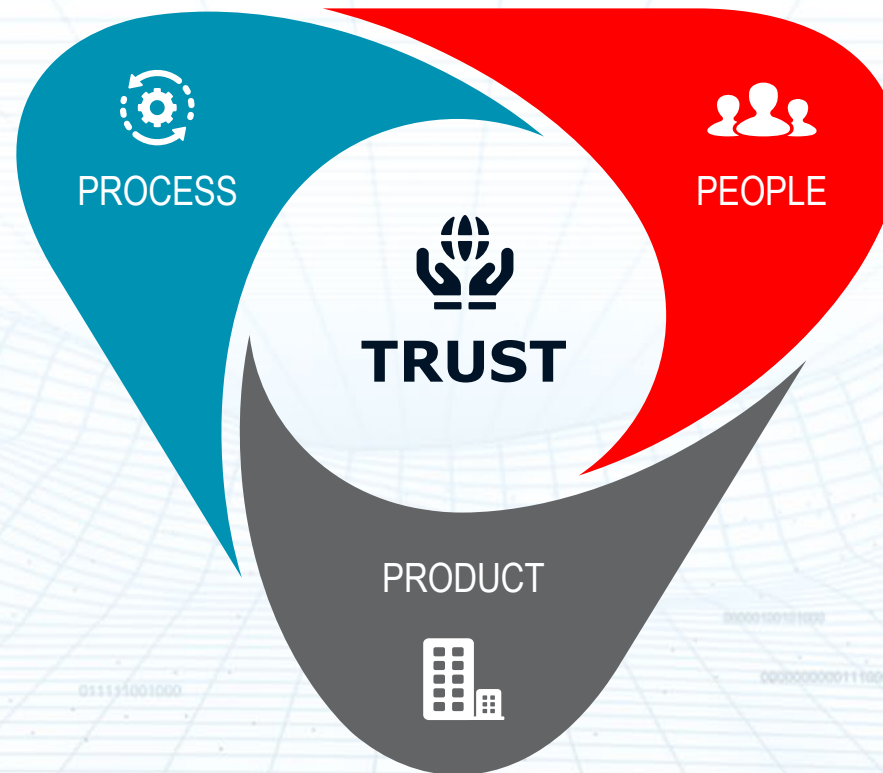
CFO:
What if we train our
people and they'll
LEAVE?

CEO:
What if we don't train
them and they'll STAY?

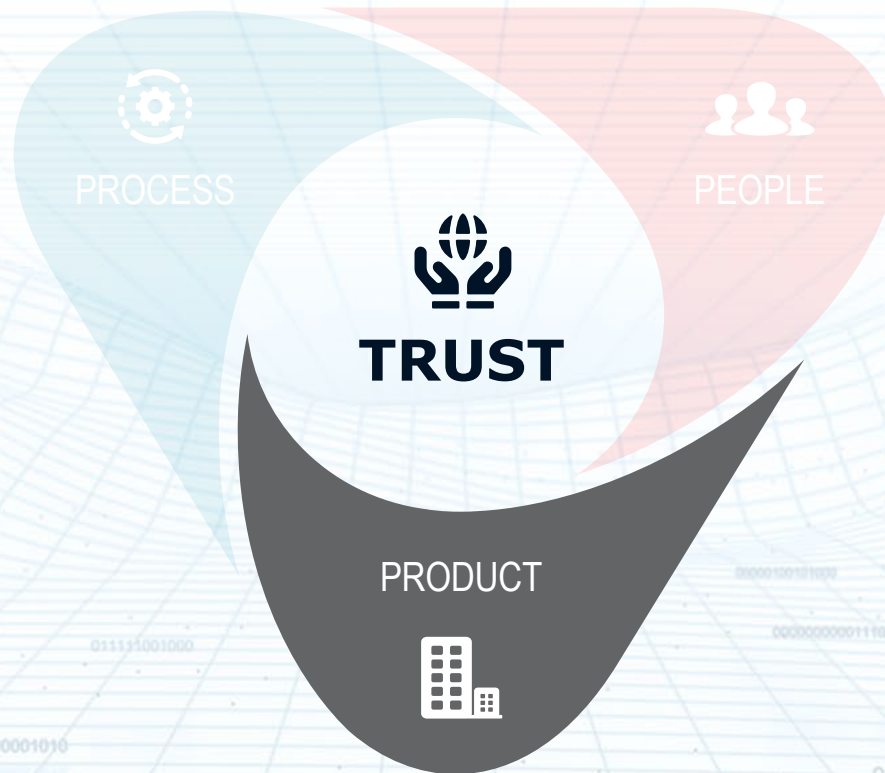


Data centre operators/owners
are at **GREAT** risk
thinking all is okay
but risk is lurking

The 3 P's!



The 3 P's!

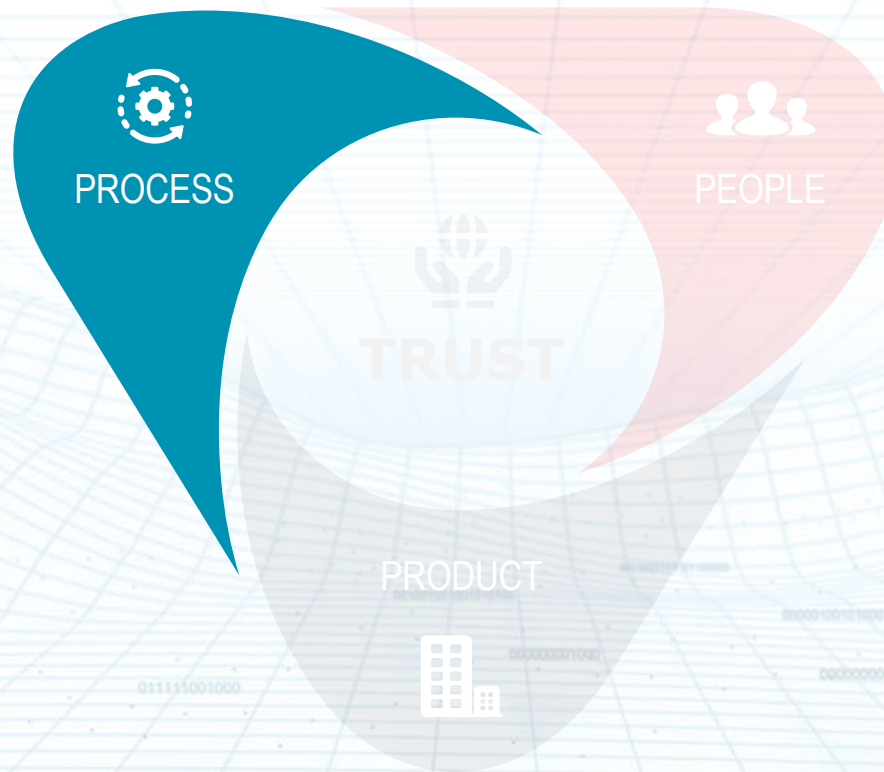


Facilities Certification

- EPI is a Registered & Accredited Certification Body
- Facility Standards Covered
 - ANSI/TIA-942
- Qualified and experienced lead auditors in all continents
- Internally developed audit tool set for stringent but efficient audits and reporting



The 3 P's!



Minimum Maturity Level required in any Data Center is 3



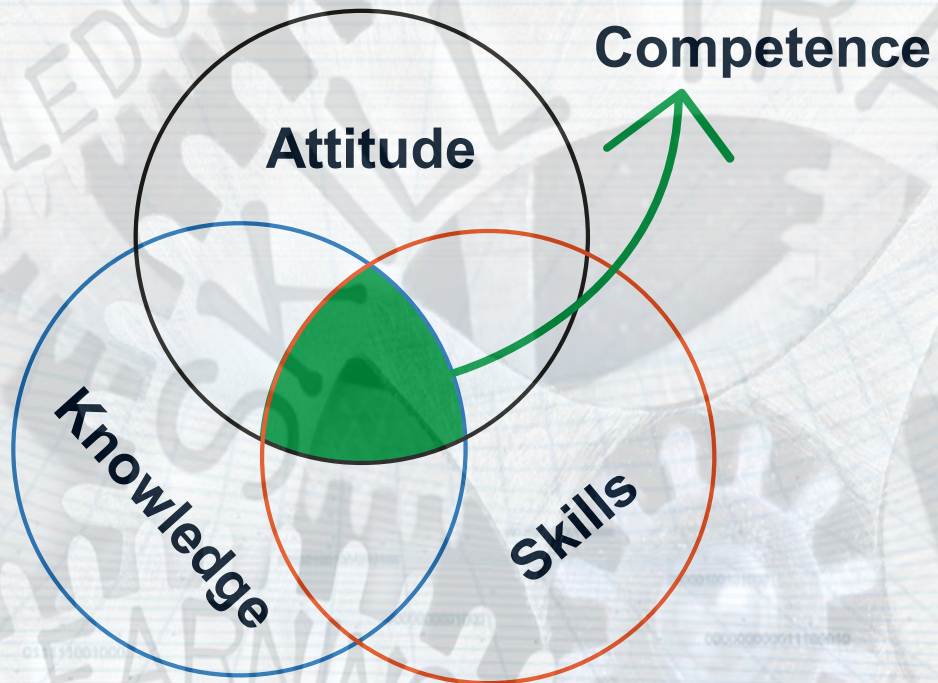
Data Center Operations



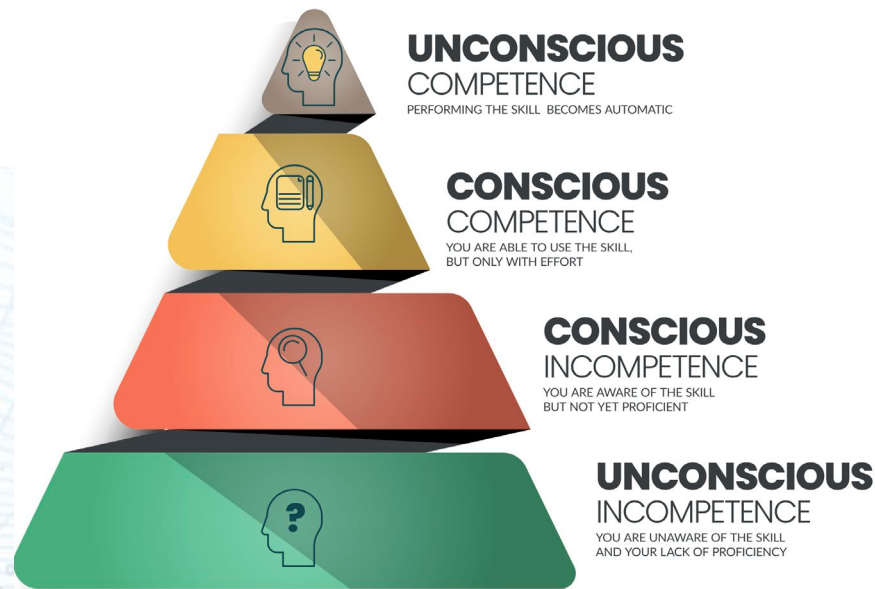
**Data Center Reliable Service
– Maturity Level**

The 3 P's!





Four stages of competence



Facilities Maintenance Skills matrix

	P E T E R	J A Y	J O S H	Y U S U F	E T C
UPS Brand-A/Model-xx	E	E	P	P	
UPS Brand-A/Model-yy	E	S	S	P	
Chiller Brand-A/Model-xx			E		
CRAC Brand-A/Model-xx			P	E	
Etc.					

Facilities Maintenance Classifications (high level version)

Classification	Competencies (minimum requirements)
Professional (P)	Perform basic read out of the alarm panel and classify the alarm messages based on severity
Specialist (S)	- Perform read out of basic parameters and status of equipment - All knowledge/skills as described in the Professional level, plus - Perform shutdown and startup procedures
Expert (E)	- All knowledge/skills as described in the Specialist level, plus - Ability to disconnect and reconnect system from the rest of the infrastructure (where applicable) - Perform system calibration and setup - Perform diagnostics and repair at Spare Part Kit Level-1

4.1 Master Resource Matrix (MRM)

Below is an example of a Master Resource Matrix

Function	# Office Hours			# Out-Of-Office Hours			# Breaks		
	On Duty	On Duty Backup	Stand by	On Duty	On Duty Backup	Stand by	On Duty	On Duty Backup	Stand by
Security Manager	1	1		1	1		1	1	
Safety Manager	1	1		1	1		1	1	
Operations Manager	1	1				1			1
Floor Manager	1	1				1			1
Telecoms Engineer	2					1	1		1
Data Center Engineer	3			1		1	1		1



The Detailed Resource Matrix maps the requirements of the MRM against actual names of the staff deployed by the organization.

Resource Schedule; Week-1 (dd-mmm-yy) – (dd-mmm-yy)

Function	# Office Hours			# Out-Of-Office Hours			# Breaks		
	On Duty	On Duty Backup	Stand by	On Duty	On Duty Backup	Stand by	On Duty	On Duty Backup	Stand by
Security Manager	Brian	Carrie		Peter	John		Brian/ Carrie	Carrie/ Brian	
Safety Manager	Brian	Carrie		Peter	John		Brian/ Carrie	Carrie/ Brian	
Operations Manager	Dave	Carol				Dave			Carol
Floor Manager	Carol	Dave				Dave			Carol
Telecoms Engineer	Charlie/ Don					Carlie	Charlie/ Don		Don/ Charlie
DC Engineer	Sarah/ Mark/ Lee			Mike		Lee	Sarah/ Lee		Lee/ Sarah

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Career development

- Current / future position
- Benchmark
- Identify already existing talent
- Keep the “back door” closed



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Competences Framework

Dimension-1 5 - DCCF areas (A-E)	Dimension-2 DCCF-Competences identified	Dimension-3 DCCF-Competence proficiency levels e-1 to e-5				
		e-1	e-2	e-3	e-4	e-5
A. Plan	A.1. Data Centre and Business Strategy Alignment					
	A.2. Business plan development					
	A.3. Service Level Management					
	A.4. Technology trend monitoring					
	A.5. Site Planning					
	A.6. Architecture Design					
	A.7. Sustainable development					
B. BUILD	B.1. Architectural					
	B.2. Electrical engineering					
	B.3. Mechanical engineering					
	B.4. Telecommunication engineering					
	B.5. Fire and safety engineering					
	B.6. Physical Security engineering					
	B.7. Test and Commissioning					
	B.8. Documentation production					
C. RUN	C.1. Service delivery					
	C.2. User support					
	C.3. Problem management					
	C.4. Change support					
D. ENABLE	D.1. Quality strategy development					
	D.2. Human resource management					
	D.3. Education and Training					
	D.4. Information management					
	D.5. Knowledge management					
	D.6. Sales management					
	D.7. Sales proposal development					
	D.8. Purchasing					
	D.9. Contract management					
	D.10. Vendor management					
E. MANAGE	E.1. Data centre operations management					
	E.2. Facilities Management					
	E.3. Risk Management					
	E.4. Project and port					
	E.5. Relationship ma					
	E.6. Quality manager					
	E.7. EH&S managem					
	E.8. Process manage					
	E.9. Information sec					
	E.10. Asset managem					
	E.11. Governance					

5 Competence levels

Required Competences

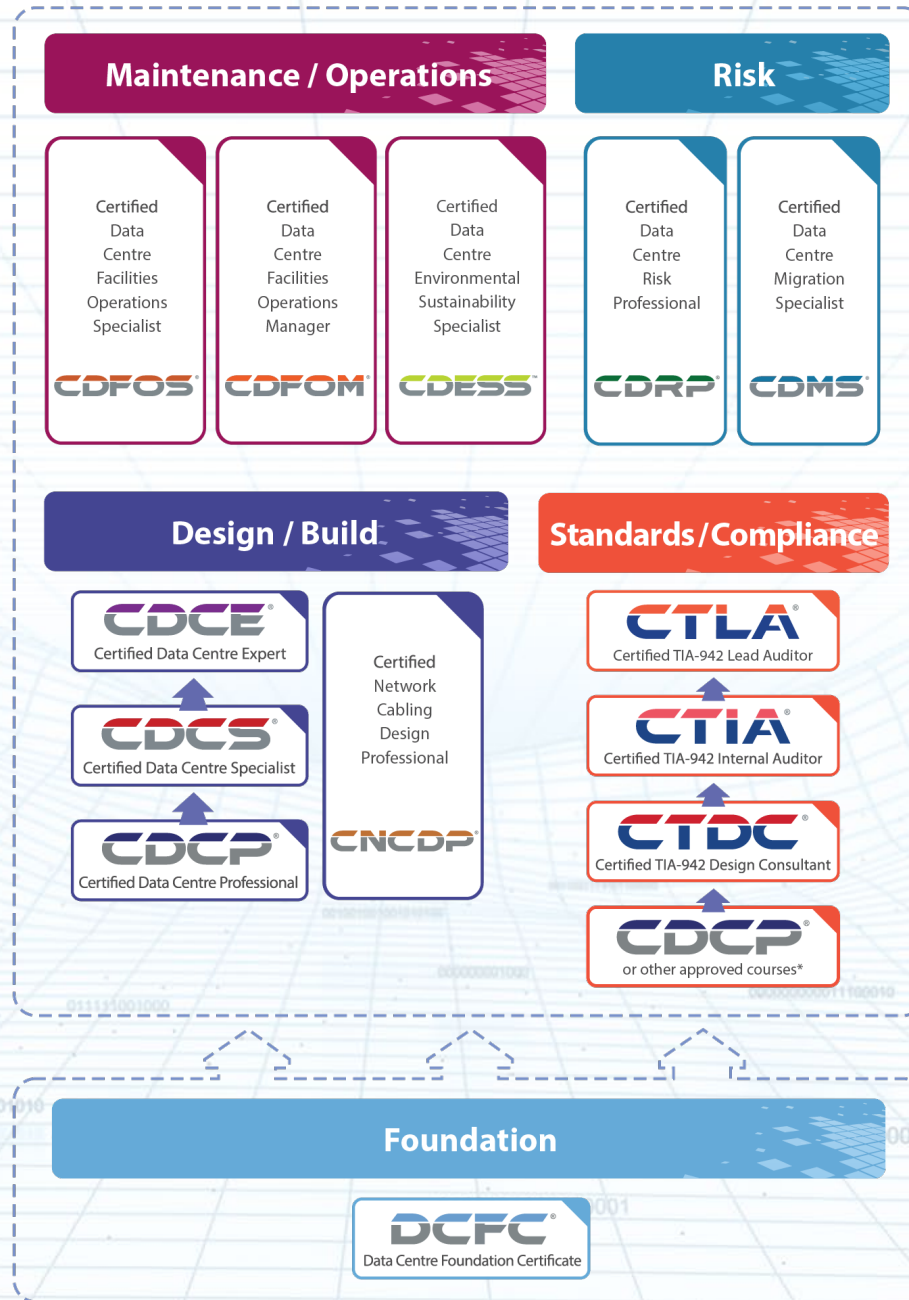
5 Areas
Plan, Build, Run, Enable,
Manage

Data Center Career Plan

9.1 Data Centre Manager

Profile title	Data Centre Manager		
Summary statement	Develops, operates, guides and maintains a data centre which is compliant to relevant standards/codes and meets the business needs.		
Mission/general skills description	Specifies the strategic direction for the data centre (organization) and converts it into a strategic business plan. Translates the mission and vision, together with his management team and sets the tactical strategy and operational objectives. Has overall responsibility and accountability for the strategy, the financials and the operational result.		
Deliverables	Accountable	Responsible	Contributor
	Strategic business plan	- Business requirements - Financials - Management business review	ICT strategy
Main task/s	- Budget control and responsibility: Profit and Loss (CapEx, OpEx, EBITDA, EBIT) - Define the data centre business strategy to support the ICT environment - Responsible for the quality and management of customer-supplier relationships - Define and ensure compliance with Service Level Agreements - Negotiate complex contracts with vendors, suppliers and third parties - Make recommendations to general ICT management - Responsible for the operational results and human resource management		
DC-Competence (From DCCF [©])	A.1. Data Centre Business and Strategy Alignment		Level 5
	A.2. Business Plan Development		Level 5
	D.2. Human Resource Management		Level 4
	E.5. Relationship Management		Level 4
	E.11. Governance		Level 4-5
KPI area	Overall added value, efficiency and effectiveness of the data centre		
EPI-DC Framework [©] Disciplines	All disciplines		
EPI courses	Required; - CDCP - CDCS - CNCDP - CDFOM - CDESS Added value; - CDCE - CDRP - CTDC - CDMS - CITM		

Data Center Training Framework



Design / Build

CDCE[®]

Certified Data Centre Expert



CDCS[®]

Certified Data Centre Specialist



CDCP[®]

Certified Data Centre Professional

Certified
Network
Cabling
Design
Professional

CNCDP[®]



Maintenance / Operations

Certified
Data
Centre
Facilities
Operations
Specialist

CDFOS

Certified
Data
Centre
Facilities
Operations
Manager

CDFOM

Certified
Data
Centre
Environmental
Sustainability
Specialist

CDESS



Risk

Certified
Data
Centre
Risk
Professional

CDRP

Certified
Data
Centre
Migration
Specialist

CDMS



Standards/Compliance



To be released 2024



3 free resources

1 DCCF (Data Centre Competence Framework)



2 Data Centre Training Quick Guide



3 DCPT (Data Centre Career Planning Tool)



Thank you!



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