OPEN POSSIBILITIES.

OCP Ready Guidelines for Deploying Modular Data Centers

NOVEMBER 9-10, 2021

OCP Ready Guidelines for Deploying Modular Data Centers

Karl Rabe, Colocation.Green
Rob Coyle, OCP Ready Project Co-Lead

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Panel Introduction

DATA CENTER FACILITIES

Karl Rabe

- Mechatronic Engineer
- Sustainable DC Pioneer (Windcloud Br. / Windcloud 4.0)
- SDN Cloud & HPC Architect

Rob Coyle

- Construction Heritage
- Technology Addict
- Infrastructure Problem Seeker

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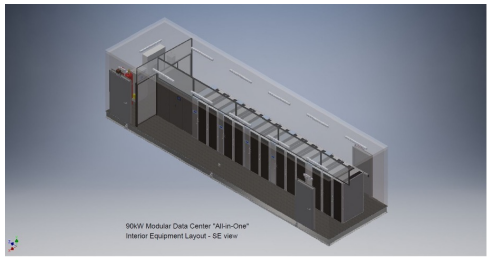
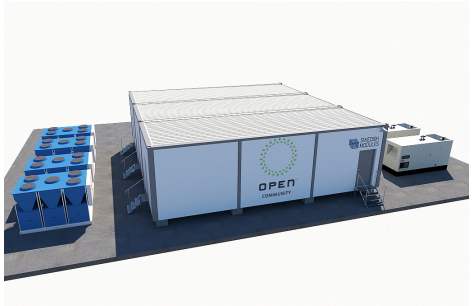
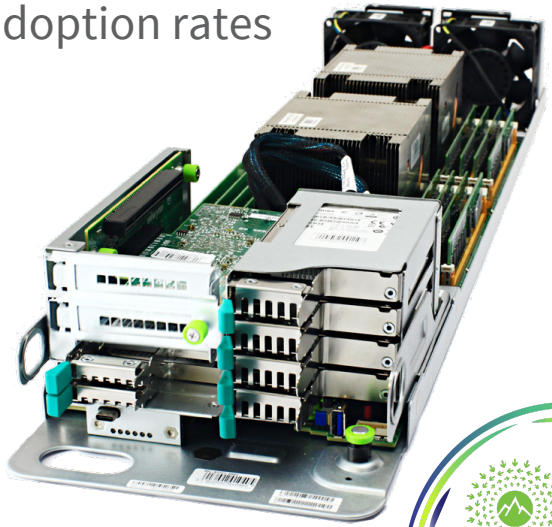
Problem Statement

DATA CENTER FACILITIES

- There is a lack of consistency around modular data center site requirements.
- Specific requirements for deploying OCP hardware in a modular environment needs to be considered to improve adoption rates and leverage advantages of OCP Hardware.







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Potential Resource

Step 1 · Confirm your facility meets the OCP Colo Facility Guidelines for OCP Racks.

Step 2 · Must complete the OCP Ready™ Colo Site Assessment (Excel Version), (Google Sheet Version) (please reach out to Foundation Staff or OCP Project Leads for assistance with the Assessment)

If approved, your facility will receive OCP Ready recognition and logos, and will be listed on the OCP Marketplace (if contributor is an OCP Colo Solution Provider).

Proposed Solution

DATA CENTER FACILITIES

- DCF-MDC Workstream - OCP Ready MDC
- Guidelines to level set site requirements for modular data centers
- Model after existing OCP Ready requirements

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OCP Ready Guidelines

DATA CENTER FACILITIES

- Guideline document status
- Example challenge adopting existing OCP Ready Guidelines

- Checklist status
- What criteria are most critical in a modular data center compared to a colocation facility

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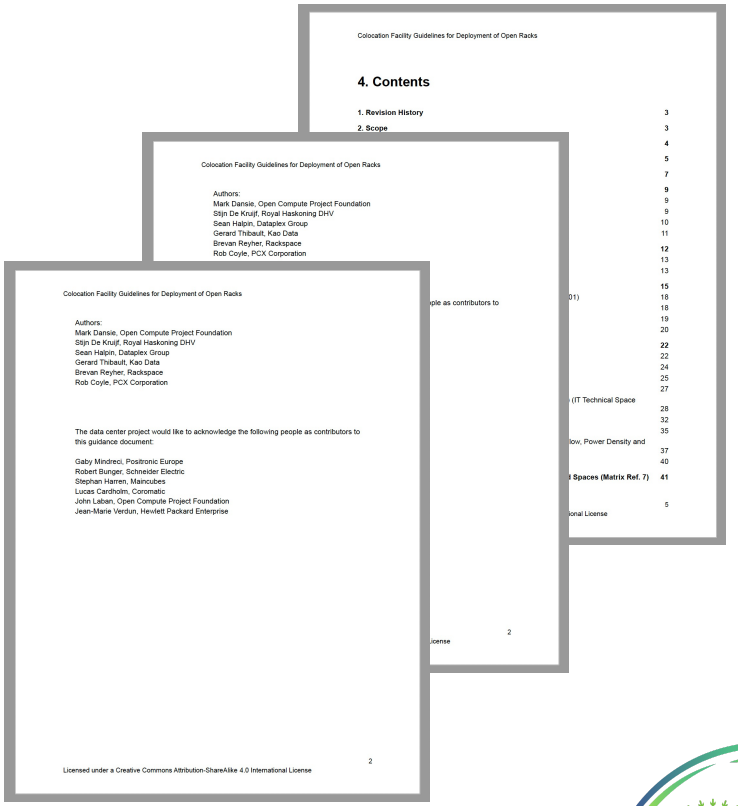
Product/Facility Info

OCP READY™

OPEN Compute Project

Colocation Facility Guidelines for Deployment of Open Racks



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Product/Facility Info

OCP Ready COLO Facility Assessment	[Site #1 specific name]			[Site #2 specific name]			[Site #3 specific name]		
Self Assessment Status:	NOT COMPLETED			NOT COMPLETED			NOT COMPLETED		
Data Center Location Name									
Data Center Location Address									
Site Description: White Space Area									
Site Description: Critical IT Power									
Site Description: Network Provider Availability									
Site Description: Facility Features									
Site Description: Other Services									
Date Original Assessment is Completed									
Re-Assessment Date:									
REQUIREMENTS - Attribute (Must have an Optimum or Acceptable result)	**Parameter**	**Result**	**Notes**	**Parameter**	**Result**	**Notes**	**Parameter**	**Result**	**Notes**
ACCESS									
Building Access	0. Selection Required			0. Selection Required			0. Selection Required		
Delivery pathway, Loading dock to Goods In	0. Selection Required			0. Selection Required			0. Selection Required		
Delivery pathway, Goods in to White space	0. Selection Required			0. Selection Required			0. Selection Required		
Corridor floor rolling load	0. Selection Required			0. Selection Required			0. Selection Required		
Unboxing/pre-staging/storage area floor uniform load	0. Selection Required			0. Selection Required			0. Selection Required		
Unboxing/pre-staging/storage area floor concentrated load	0. Selection Required			0. Selection Required			0. Selection Required		
RAMPS									
Gradient	0. Selection Required			0. Selection Required			0. Selection Required		
Width	0. Selection Required			0. Selection Required			0. Selection Required		
Landing area	0. Selection Required			0. Selection Required			0. Selection Required		
Railings	0. Selection Required			0. Selection Required			0. Selection Required		
LIFTS / ELEVATORS									
Weight loading	0. Selection Required			0. Selection Required			0. Selection Required		
Door height	0. Selection Required			0. Selection Required			0. Selection Required		
Width	0. Selection Required			0. Selection Required			0. Selection Required		
Depth	0. Selection Required			0. Selection Required			0. Selection Required		
WHITE SPACE									
Floor rolling load	0. Selection Required			0. Selection Required			0. Selection Required		
Floor uniform load	0. Selection Required			0. Selection Required			0. Selection Required		
Floor concentrated load	0. Selection Required			0. Selection Required			0. Selection Required		
Finished floor to ceiling height	0. Selection Required			0. Selection Required			0. Selection Required		
Access floor clearance	0. Selection Required			0. Selection Required			0. Selection Required		
ELECTRICAL									
Number of independent circuits to the rack	0. Selection Required			0. Selection Required			0. Selection Required		
Maximum circuit capacity	0. Selection Required			0. Selection Required			0. Selection Required		
Circuit voltage	0. Selection Required			0. Selection Required			0. Selection Required		
Circuit frequency	0. Selection Required			0. Selection Required			0. Selection Required		
Power receptacle / WP Type	0. Selection Required			0. Selection Required			0. Selection Required		
Circuit receptacle location	0. Selection Required			0. Selection Required			0. Selection Required		
Upstream UPS options	0. Selection Required			0. Selection Required			0. Selection Required		
Rack-based batteries permitted	0. Selection Required			0. Selection Required			0. Selection Required		
Generator load acceptance time	0. Selection Required			0. Selection Required			0. Selection Required		
COOLING									
Rack airflow direction	0. Selection Required			0. Selection Required			0. Selection Required		

Call to Action

- How to get involved in the Project/Sub-Project Community
- Timeline for Contribution Availability
  - OCP MDC Checklist – 1st Draft November 2021
  - OCP MDC Guidelines – 1st Draft January 2022

Project Wiki with latest specification : https://www.opencompute.org/wiki/Data_Center_Facility/OCP_Ready

Mailing list: https://ocp-all.groups.io/g/OCP-MDC

Open Discussion