Datacenter Facility Assessment Checklist

Introduction: How to Use This Tool

Use this checklist to aid in the process of selecting a new site for the data center. When visiting potential building sites, print the checklist off and take it along to record impressions and comments on the building and/or its location.

Fill in Table 1 with the sites details on location, ownership, and size.

To use Table 2, check off the appropriate columns for each item as they are assessed. Columns are recorded using the following:

- **Yes** – the site fully conforms.
- **PAR** – Partial conformity. NOTE: If a partial conformity exists, an explanation describing the partial conformity along with planned actions to remediate should be entered in the comments field.
- **No** – Does not conform. NOTE: If a non-conformity exists describe the non-conformity and if any action to remediate is planned. Also note where no remediation is possible.
- **N/A** – Not applicable

To use Table 3 Fill budget value against Capital Cost or Operating cost with appropriate remarks

- **Capital Cost** –one-time expenses to be made for Building datacenter. Some time referred as Non-Reoccurring Cost (NRC)
- **Operating Cost** – The expenses made for maintenance and operations of facility. Also referred as Recurring cost (RC) or Monthly Recurring Cost (MRC).

Table 1: Site Details

Site Address:	
Location Type: (i.e. Urban, Suburban, Industrial complex)	
Is it in an existing building or a new building?	
Floor Number	
Leased or owned?	
Floor space (square feet):	

Table 2: Building Site Selection Checklist

Item #	Item	Yes	PAR	NO	N/A	Comments
1	Are there low risks from environmental threats such as: Aircraft traffic?					
1.1	Earthquakes?					

1.2	Floods?				
1.3	Hurricanes or tornados?				
1.4	Heavy ice or snow?				
1.5	Nearby hazardous industry?				
1.6	Does the location have a high crime rate?				
2	Are there secure utility service entries?				
3	Does the site have the ability to limit or restrict physical access to the data center?				
4	Is hard water a potential problem?				
5	Are multiple-grid commercial power services available?				
6	Are there data/voice communications nearby and capable of supporting requirements?				
7	Is there public transportation available nearby?				
8	Is there adequate parking available?				
9	Is the parking area physically separated from the building by barriers?				
10	Is the labor market adequate to support requirements?				
11	Is the loading dock access at truck bed height?				
12	Are there ramps for loading dock?				
13	Are there local ordinance restricting truck/delivery traffic?				
14	Is loading dock and staging area secure and segregated from sensitive areas?				
15	Can elevators, ramps, doors, and other passageways accommodate large equipment?				
16	Is the stand-by generator physically isolated and secured?				
17	Is the UPS (batteries) located in a separate, secured, and ventilated area?				

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18	Is special floor loading required for UPS, generators, cooling or other heavy equipment?					
19	Can the computer room(s) be made air-tight if a gaseous fire suppression agent is to be used?					
20	Computer room(s): Positive drainage of area under raised floor?					
21	Computer room(s): Positive check valve to prevent sewer gases or other drain backup?					
22	No external windows in computer room(s)?					
23	If there are internal windows are they shatter-proof and secure?					
24	Raised floor does not require ramps for access (e.g., sunken floor design).					
25	Are water lines under computer room floor only used for cooling equipment?					
26	Is the flooring surface able to withstand freight handling equipment without damage?					
27	Are equipment staging areas secure, conditioned, and physically separated from computer room(s)?					
28	Is there no evidence of power outages to the facility? If evidence of outages exists describe frequency and durations.					
29	Does power to the facility appear clean? Is there visual evidence of light flicker, or the existence of motors and other industrial equipment on the site?					
30	Is there a record of the electrical utility's performance data (interruptions)?					
31	Does the site have power metering and monitoring solutions?					
32	Is computer room(s) supplied by separate power feed?					
33	Does the facility have isolated equipment grounding in place?					
34	Is the facility protected from transient ground faults and					

	lighting?					
35	Is there a secure, building code compliant fuel storage area for generators?					
36	Does adequate hot water supply exist for humidifiers servicing the data center?					
37	Is external cooling equipment (chillers, pumps, towers) able to be secured and made accessible only by authorized personnel?					
38	Is there room for expansion?					
39	Is the Building owned by company?					
40	If the building is leased from other vendor, for how long lease it valid?					
41	Is the datacenter building fully occupied by company?					
42	In case of collocation, what kind of other companies using same building					

Table 3. Budget related Checklist

This list consider components on high level as you might need to have details cost sheet for each and every item needed for built datacenter.

Item #	Item	Capital Cost	Operating Cost	Comments
1	Budget of Datacenter Space/Building			
2	Budget of Datacenter Electricity			
3	Budget for Generators			
4	Budget for UPS			
5	Budget for Safety system like CCTV etc			
6	Budget for electrical/ Service provider/network cabling etc			
7	Budget for fire safety			

8	Budget for interiors			
9	Network Racks			
10	Server Racks			
11	Telecom Racks			
12	Network Equipments			
13	Servers			
14	Storage SAN etc			
15	Backup Solution/ With Restore Solution			
16	Disaster Recovery, business Continuity Plan Option			
17	WAN Connections			
18	Internet Connections			
19	Internal Audits			
20	External audits/Certifications			
21	Innovations/ Inventions/ Patents			

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