



DreamMark1 Co., Ltd.

Company Introduction

2021

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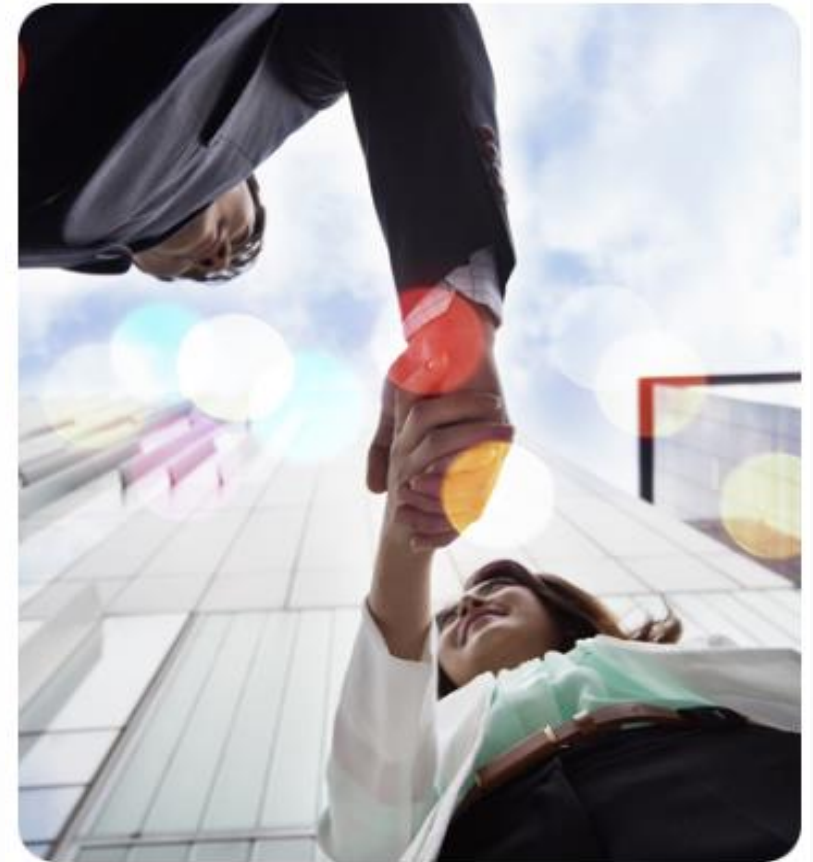
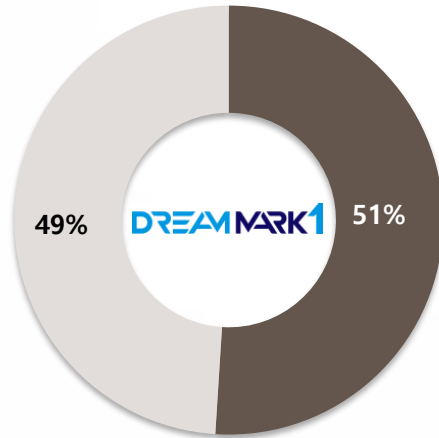
Company
Outline



Provision the very best service with State-of-the-art environment

- ▶ Company Name DreamMark1 Co., Ltd.
- ▶ CEO Ji-Chang YU
- ▶ Established Dec 7th, 2016
- ▶ Address 61, Digital-ro 31-gil, Guro-gu, Seoul, Republic of Korea
- ▶ Main Service IDC infra (Co-location), Hosting, Security Solution, CDN, MSP

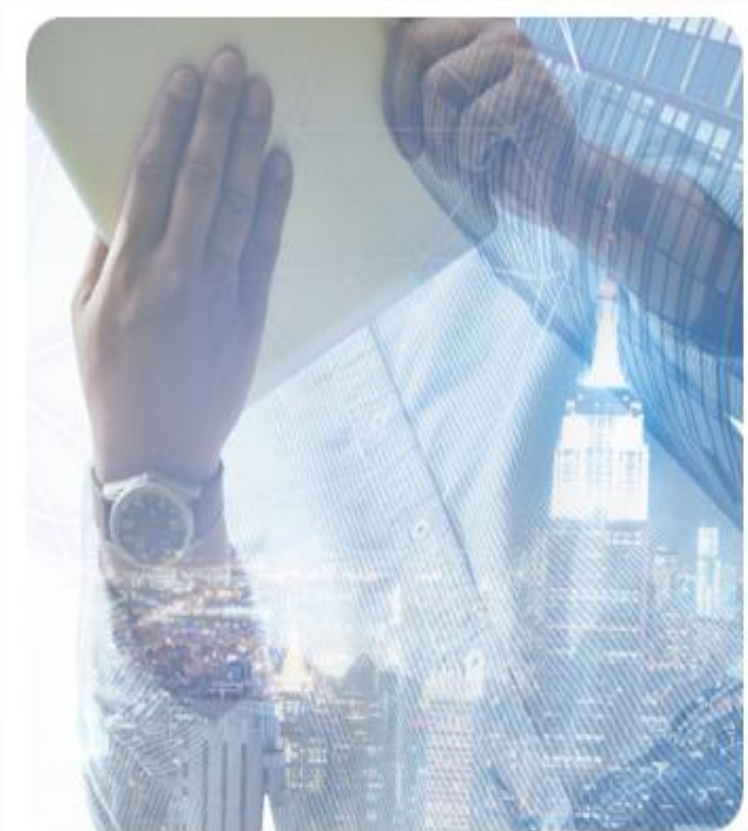
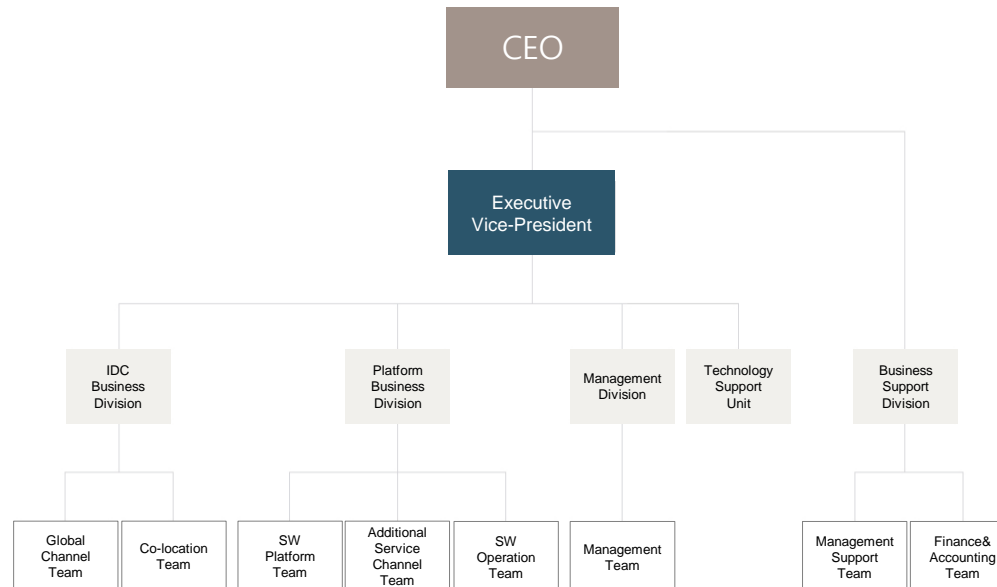
Shareholder
Structure



Organizational System through Specialists by Professional Field

We put top priority on non-stop operations for protecting customer's key asset by assignment of professionals

- ▶ 2018. 09 Guro IDC Business Starting
- ▶ 2018. 09 Gasan IDC Business Starting
- ▶ 2018. 06 DreamMark1 IDC Business Starting



1. Stability/
Quality

Forte of DreamMark1

Best reliability, Best quality network service

Uninterruptible power supply by triple power supply system from KEPCO(2N, Guro/Doksan substation)

Provision of excellent dedicated line service and price competitiveness through IX interconnected network which is directly connected to major domestic ISPs

Thorough 24/7/365 real-time monitoring system (DCIM, NMS) for IDC facilities, power and network

2. Accessibility

Optimal Accessibility

Connection to Sangam area (Media center) and Pangyo area (Game center) as a Neutral IDC

Located in G-Valley (Guro/Gasan) which is optimized for the center of Seoul IT business companies

3. Neutral IDC

Provision of network operator's Internet access point (POP)

Provision of stable service through connection of multiple communication carriers

XC service stability guarantee through customer dedicated cross connect zone



Main Service

2-1. Co-location

2-1. Co-location

2-2. Leased Line

2-3. Hosting

2-4. Security

2-5. CDN

2-6. Management

Co-location

Co-location is a service that provides rack which customer can install its information system and network equipment with operation management.
*Co-location = Rack service + line



Best network infrastructure

Dreammark1 has secured a competitive price and excellent quality line through business agreement with Dreamline which owns 57,000 km of optical communication network nationwide and can use IX interworking network directly connected with domestic / foreign CP / ISP at Dreammark1 IDC.



State-of-the-art co-location environment

It provides the best infrastructure environment such as diverse power, air conditioning system, network configuration and thorough security for stable service.



Stability

IDC specialist engineers operate a real-time control room 24/7 to actively cope with various accidents and obstacles so that customer's information system is stably operated.



Main Service

2-2. Leased Line

2-1. Co-location

2-2. Leased Line

2-3. Hosting

2-4. Security

2-5. CDN

2-6. Management

Leased Line

- Leased line is a monopolized independent line that provides a secure and reliable B2B premium line service.



Security /stability

It is highly secure because it uses the connected network independently between two specific points, and also provides the highest reliability by using the highway underground.



Provide high quality service

The dedicated line consist of 100% optical cable and provides high quality service.



Provide nationwide diverse network

Since network is constructed with built-in grid and double, it can automatically and quickly recover when a problem occurs.



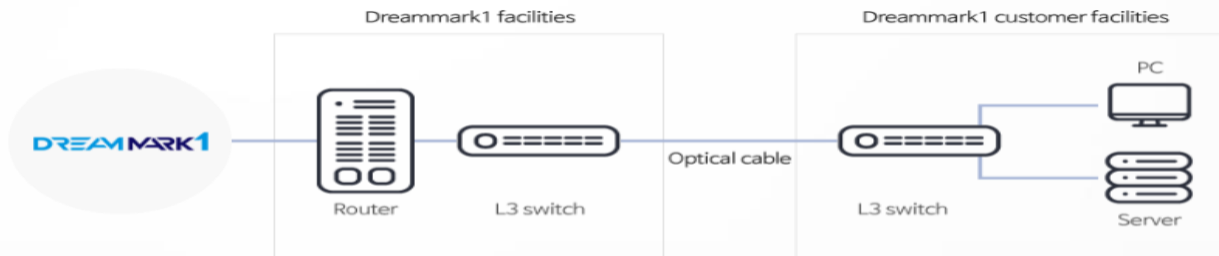
Providing One-Stop Service

Dreammark1 offers one-stop service from service opening to future maintenance by 1: 1 matching between a customer and the person in charge.



24 /7 customer service center operation

24 hours a day, 365 days a year, the network operation center controls the nationwide network in real time and operates a customer service center.



Hosting

Server Hosting

It is a service that provides server, network(circuit), operation / control etc., which required for business operation



Ensure server choice

Dreammark1 IDC cooperates with leading domestic and foreign server manufacturers (HP, IBM, DELL, etc.), so customers can get 100% product guarantee with various server options.



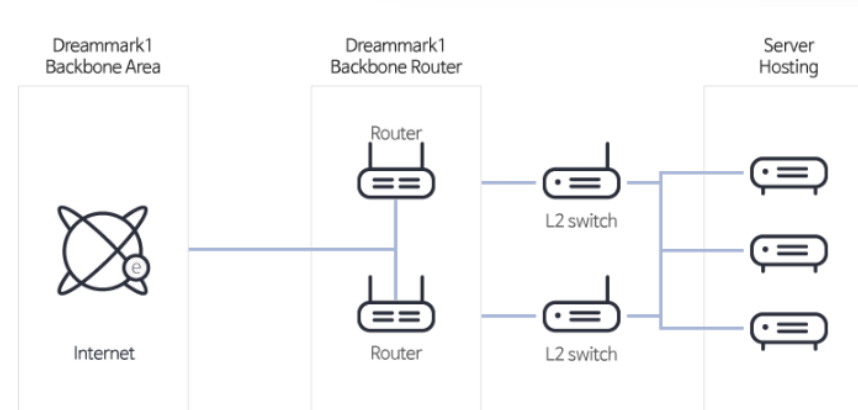
Real-time technical support

Professional engineers reside in IDC and provide integrated management through server and network monitoring 24 hours a day, 365 days a year.



1:1 dedicated layout

In order to reduce the inconvenience for provision of customers immediate technical support, we place the sales person in charge at each customer's site,



Security

► UTM

- The UTM service is a service that protects internal information systems and assets by integrating essential security features such as VPN, firewall, IPS, and content filtering



Thorough security

UTM professional security technicians establish and apply security policies so that customers can build security and deal with faults



Optimization

UTM professional security technicians can directly consult your company's information system for UTM services and operate optimized services



Control / Operation

A professional security engineer resides in the control center operating 24/7 to make sure your information system is safely protected

► Integrated Security Control

- Dreammark1's security experts directly control and protect the customer's information system 24/7 from sophisticated security threats



Convenience

Customers can apply various security solutions to their systems at once without complicated process.



Cost savings

Customers can design security with integrated firewall, IPS / IDS, VPN, and DODOs, at a lower cost than individual applications.

CDN service

It is a service that guarantees stable data and contents transmission for companies that deal with businesses such as shopping mall, portal, game, internet service company, image movie, and broadcasting by solving a traffic concentration, bottleneck, and data loss caused when contents are transmitted.



Shortest time response

You can transmit various content in the shortest time through optimal access route.



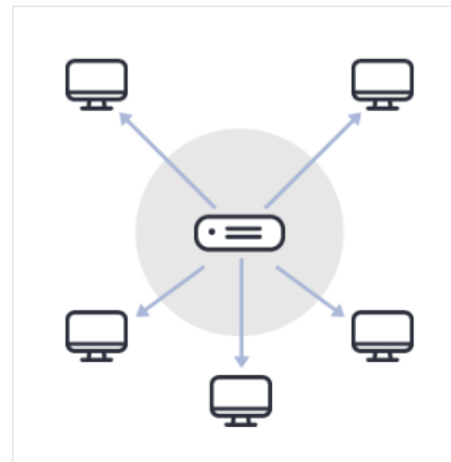
Mass traffic can be transmitted

You can quickly transfer large amounts of traffic content (videos, images, files, etc.) to content users.

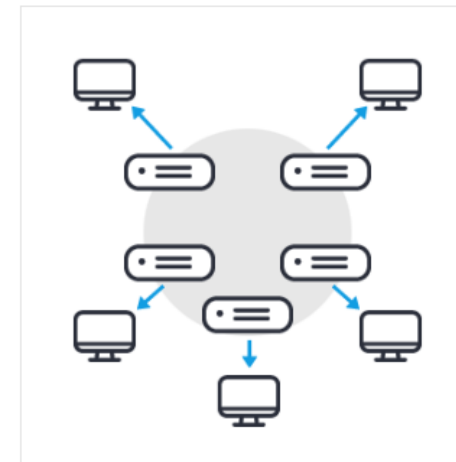


Convenience

Customers can provide convenience to users through increasing performance and fast loading.



Before CDN Service Configuration



After CDN Service Configuration

Main Service

2-6. Management

2-1. Co-location

2-2. Leased Line

2-3. Hosting

2-4. Security

2-5. CDN

2-6. Management

Management

- It is an IT outsourcing service that manages customer's IT information system and infrastructure resources by utilizing the resources of Dreammark1 such as specialized personnel, facilities, equipment, solution and network resources.



Best Consulting

IDC experts provide optimal consulting by analyzing customer information systems in detail



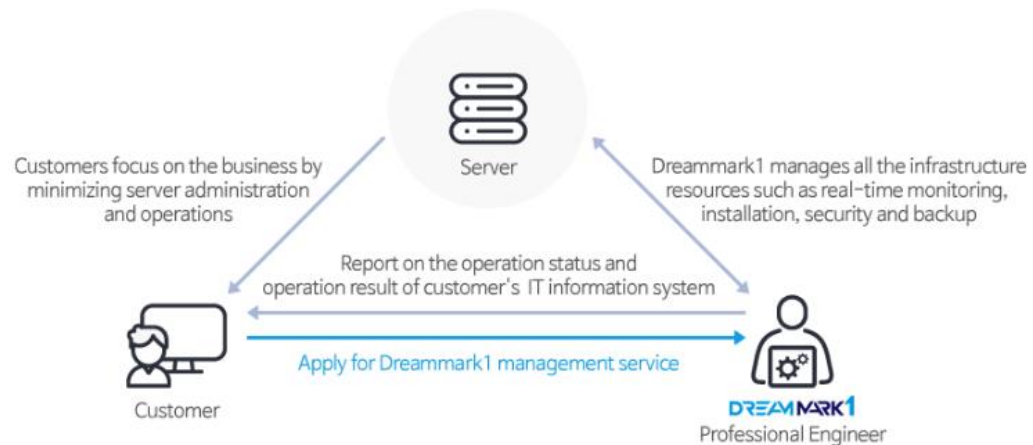
Cost savings

By managing the entire IT system and infrastructure to Dreammark1, customer can significantly reduce the construction and operation costs.



Minimize the failure rate

Customer IT information systems are always up-to-date to defend against a variety of security threats and minimize system failures.



IDC Facility Summary



Up to Magnitude 6.0 Seismic Design
Height 4.8M (Easy to install larger system – More than 1M height clearance compared to other buildings)
Space-Saving & Utilization Design for space maximization



Uninterruptible power supply by triple power supply system from KEPCO(2N, Guro/Doksan substation)
including UPS/Storage Battery(Li-ion, 2N) and Emergency Generator(N+1 2,250kW Generator)



Separated Operation of data processing room and air-conditioning room, Water leak detection system,
Cooling Tower for IDC only : High efficiency water cooling type(N + 1)
Thermo-hygrostat : Energy-Saving & free-cooling type(Water/Air cooling dualization)



4 stages access control security system
- 1st floor entrance Information / Elevator control / Penetration alert system into buildings/ System room entrance alert
- IC card, Speed Gate, Vein matching, CCTV, Security Guards monitoring on 24/7/365,
Semi transparent window glass, Glass breakage detector installation



24/7/365 Disaster Prevention/Control Center
- Fire/Smoke Detector , Auto gas fire extinguishing system(NAF 3)

3-1. Co-location Facility

- 3-1. Co-location Facility
- 3-2. Power Facility
- 3-3. HVAC
- 3-4. Fire Fighting
- 3-5. Security
- 3-6. Operation Center
- 3-7. IDC location

Co-location Space

Facility

- Congenial containment system suited for IDC surroundings

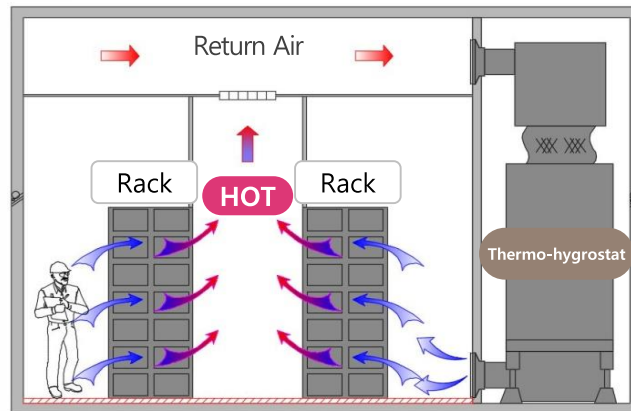
High-Power Zone

Environment

Height 4,800mm, Co-location space 2,700mm
(For high thermogenic server)

Type of Containment

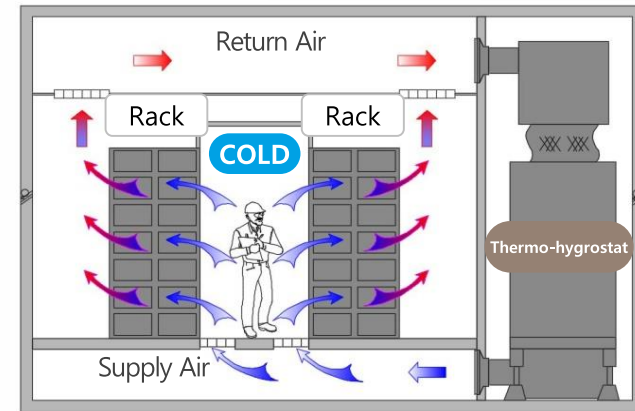
Applied **Hot Aisle Containment**
for quick heat emission



Low-Power Zone

Height 4,800mm, Co-location space 2,700mm
(Raised Floor)

Independent configuration (unconnected with ceiling module)
Applied **Cold Aisle Containment**



IDC Infra

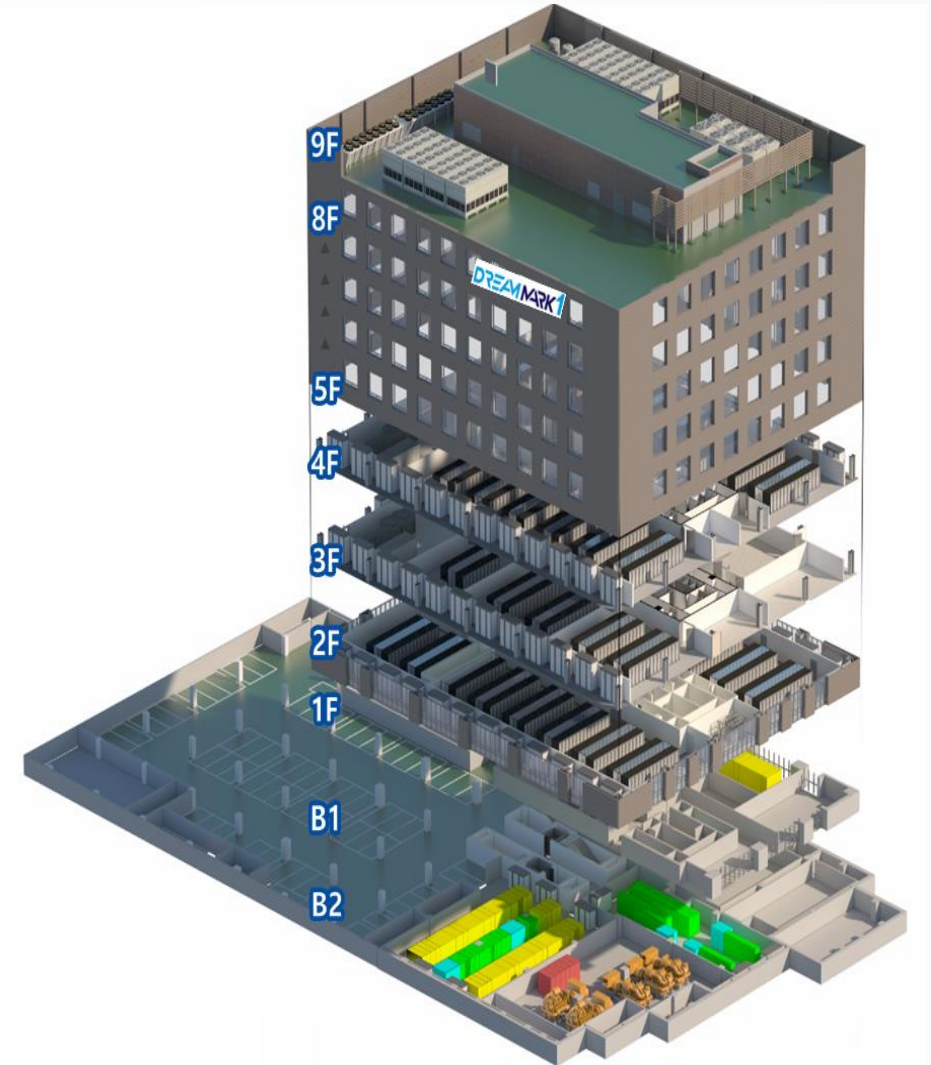
3-1. Co-location Facility

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IDC Infra

Data Center Internal Structure

9F	Cooling tower, Circulating pump	
8F	Office	
7F	Office	
6F	Office	
5F	Office	
4F	Data Center (SMB) UPS / Storage battery	
3F	Cloud Data Center UPS / Storage battery	
2F	Cloud Data Center UPS / Storage battery	
1F	Lobby / Retail	
B1F	Parking Area	UPS, Storage battery
B2F	Parking Area	Generator Electric Room



3-2. Power Facility

3-1. Co-location Facility

3-2. Power Facility

3-3. HVAC

3-4. Fire Fighting

3-5. Security

3-6. Operation Center

3-7. IDC location

Electric Power

Power Facility

- Uninterruptible power supply through power line dualization



Power receiving/
transformer facility



Generator



Li-ion storage battery



BUS DUCT



UPS



Smart Panel Board

UPS, Li-ion Storage Battery,
Smart Panel Board (Dualized System)

- 1 Power receiving/transformer /Generator/UPS/Storage Battery
Substation dualization(Guro/ Doksan)
Generator for communication , C.T.T.S for pauseless switchover
2N UPS (15 minutes back up time)
- 2 BUS DUCK
Output power between UPS and BUS DUCT
- 3 Electrical panel/Generator/UPS /Storage Battery
UPS per floor/Li-ion battery
- 4 Smart Panel Board
Power supply & loads management per rack
Management of power quality
Voltage / Electric Current/ Electric Power Energy SCADA monitoring system

Heating, Ventilation, Air conditioning Systems

HVAC

- HVAC system for stability and energy efficiency-enhancing



Cooling Water Pipe (Standing Type)



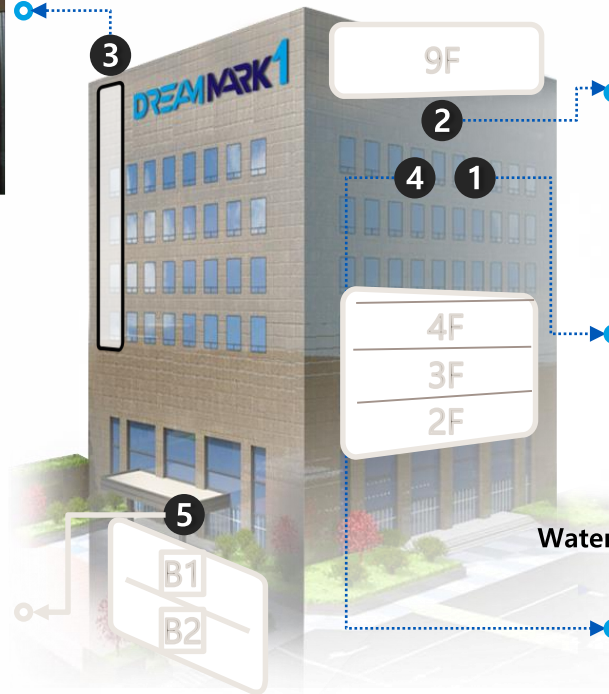
Cooling Tower / Circulating Water Pump



Energy-Saving and Water cooling type thermo-hygrostat

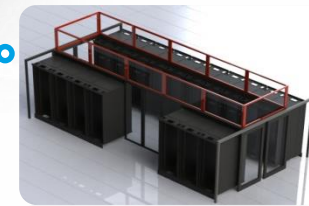


Air cooling type thermo-hygrostat



Non-disruptive System(N+1)

PUE 1.6 standard



Containment

- 1 Energy-Saving and Water cooling type thermo-hygrostat (Pre-cooling type)
- 2 Cooling Tower/Circulating Water Pump (N+1)
- 3 Standing Type cooling water pipe (N+1)
- 4 Containment
3F : Cold Aisle Containment
2F : Hot Aisle Containment
- 5 Air cooling type thermo-hygrostat

3-4. Fire Fighting

3-1. Co-location Facility

3-2. Power Facility

3-3. HVAC

3-4. Fire Fighting

3-5. Security

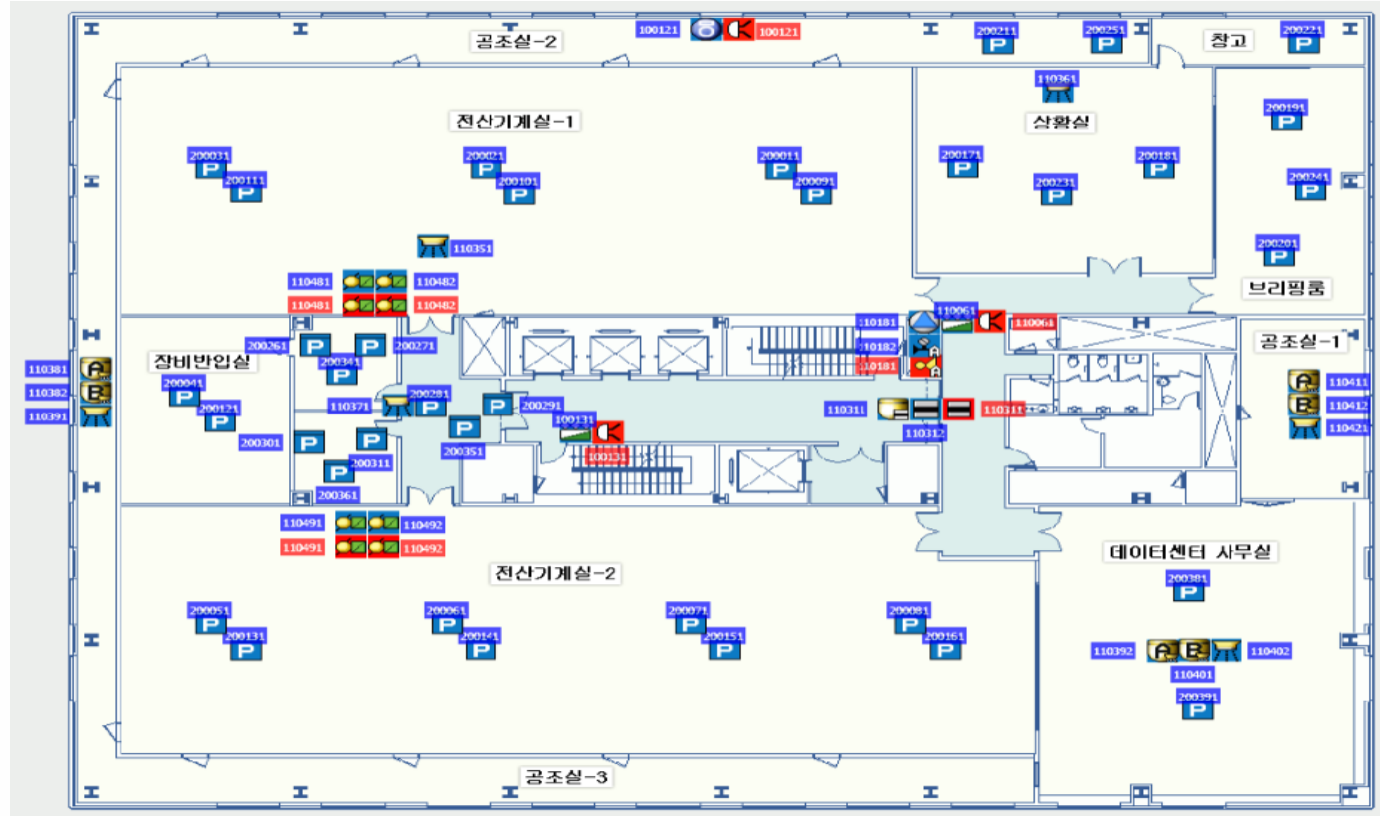
3-6. Operation Center

3-7. IDC location

Fire Fighting Facilities

Fire Protection system

- System installation for Automatic fire detection, Security alarm, P-type receiver, and 24/7/365 monitoring through connectivity disaster prevention room
- Pro-Environment Extinguishing Agent : NAF-III, HFC-125
- Dispersion type fire extinguishing equipment, Connectivity through integrated monitoring system



3-5. Security

3-1. Co-location Facility

3-2. Power Facility

3-3. HVAC

3-4. Fire Fighting

3-5. Security

3-6. Operation Center

3-7. IDC location

Security Facilities

Phase 1

- Access control & monitoring on 24/7/365 by security guards

Phase 2

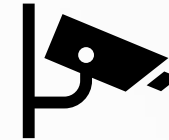
- Access control on each floor, emergency stairs, and elevators by IC card, vein matching system

Phase 3

- Internal access control on each floor by IC card and speed gate

Phase 4

- Access restriction to Data Processing/Machinery Room by vein matching system, and cage door lock



Access control & monitoring



Speed Gate



vein recognition system



Cage Door Lock system

3-6. Operation Center

3-1. Co-location Facility

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3-6. Operation Center

3-7. IDC location

Operation Center

Network Monitoring

- Real-time network monitoring
- Real-time notification & action for system failure

RTMS for Customer' Equipment Condition

- Real-time customer equipment monitoring
- Real-time notification of system failure recovery

Real time processing for Customer' request

- Real-time requisition & result notification of customer complaints
- By customer support site

Protection Method for Customer Information

- Strong access control management by Arbor Peak Flow and real-time network threshold system to customer equipment which is Defensible against DDoS attack

DCIM(Data Center Infrastructure Management) & Integrated Monitoring

- Monitoring facilities control/ power control/ glass breakage/ leakage detection by DCIM
- CCTV/Access Control/ Network Traffic Control by integrated monitoring system



3-7. IDC Location

IDC Location

Address

61, Digital-ro 31-gil, Guro-gu, Seoul, Republic of Korea, Guro IDC Center
(197-12 Guro-dong, Guro-gu, Seoul, Guro IDC Center)



3-1. Co-location Facility

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61, Digital-ro 31-gil, Guro-gu, Seoul,

Republic of Korea, Guro IDC Center

Tel : 1877-0555

Fax : 02-6007-6239

www.dream-mark1.co.kr