

# **1. Physical Security of SaaS Servers**

### 1.1 Co-Location Facility - IWEB

These co-location centres provides secure, fully managed facilities, and are located in Montreal.

Centre #1	Centre #2	
iWeb-HD (DC1)	iWeb-CL (DC2)	
Hochelaga(HD) - Data center 1	Couture(CL) - Data center 2	
3185, Hochelaga,	5945 boul. Couture	
Montreal, QC H1W 1G4	St-Léonard, QC H1P 1A8	

Local and international : + 1 514-286-4242

IWeb Technologies uses industry-leading security practices and infrastructure in facilities access and security, hardware builds, traffic routing, hardware monitoring, server room design, and escalation procedures, to ensure the physical security and redundancy of their clients' infrastructure.

#### 1.1.1 Controlling Access to Facility

The IWeb Technologies facility is protected by multiple security measures.

The access control system is composed of a biometric reader to authenticate fingerprints, access card readers, and a series of surveillance cameras.



Figure 1 – Cameras, biometrically controlled entrance to Data Centre

#### 1.1.2 Access to Server Zone at IWeb

The iWeb data centre is divided into two zones. The first is reserved for dedicated servers where the BalaBoss servers are housed.

Only IWeb personnel are authorized in this zone and no clients can go through the gates protecting it, without being accompanied by iWeb staff members.





#### 1.1.3 UPS and Generators

IWeb site includes a 300KVA UPS and a 500KVA diesel generator.



Figure 3 – 300KVA UPS

Hydro-Quebec's electricity powers the UPS (Uninterruptible Power Supplies) in case of power loss, and a diesel generator is automatically started in less than fifteen (15) seconds via an ATS (Automatic Transfer Switch).

The generator is used to supply energy to the data centre for fifteen (15) minutes every Monday morning, to ensure full functionality of the system.

#### 1.1.4 Environmental Conditioning

Air-conditioning is supplied by completely redundant 22 ton Liebert units that are linked to independent compressors. These units are used to regularize the temperature and humidity within the data centre.



Figure 4 – Air Conditioning

### 1.1.5 Data Centre Connectivity

The dark fibers enter the network room to provide Internet Access to all the clients. Cisco equipments are used for network distribution to all servers and racks.



Figure 5 – Network Room

### 1.1.6 Systems Security Operations Team

BalaBoss and IWeb Technologies have the necessary personnel in place to ensure hardware, software,



network and data security.

The BalaBoss Security Team monitors the firewall, application server, database server, and operating system (OS) configuration to ensure security and delivery of service.

Through its connections to Tier-1 Internet Service Providers and automatic routing procedures, IWeb Technologies provides 100% network availability and less than 1% sustained packet loss.

## 1.2 Co-Location Facility - HEANET

The co-location service facilitates Irish Grants Management and other Semi-State clients. HEAnet's colocation room is based in Blanchardstown, Dublin 15. Equipment in the room is directly connected to HEAnet's national backbone, and is served by an excellent suite of environmental, power and management services.

The following resources are available as part of the basic service:

- 24 X 10/100/1000 Mbps Ethernet circuits per 40U cabinet.
- 3210 Gigabytes per month transfer.
- Native IPv6 Internet connectivity.
- Remote and local control of Keyboard, Video & Mouse.
- Remote media access use your local CD/DVD/USB device on your hosted server.
- Remote hands and eyes control.
- Remote power control.
- Layer 2 Ethernet connectivity between hosted equipment and client LAN.
- Speed: Fast and reliable connection to Backbone Network.
- Reliability: connected to the Irish Research & Education Network in a controlled environment.
- Technical Support: 9:00 to 17:30 Monday to Friday.
- Free Electronic Mailing List.
- Reports, statistics of network usage.

### **1.3 Development Offices**

#### **1.3.1 Controlling Access to Facility**

- The development offices are located on the 4<sup>th</sup> floor of a modern office building.
- Afterhours access is by pass card only.
- The offices are additionally protected by an alarm system with pass code entry.
- Security system is wireless enabled and does not rely on telephone line for communication to central monitoring station.
- Motion and smoke detectors are installed.