

Letting Customers into your Space

Letting customers into your space is good for business. Strange, then, how difficult this can be.

Medusa has teamed up with the developers of DoorGuard™ to create a single drop-in solution that adds devices permitting access to your space by means of the Medusa managed infrastructure technology.

This White Paper takes you through the opportunities while helping you plan for implementation. It also offers you an opportunity to join the Medusa PlaceMakers Early Adopter programme.



Getting the most from your space

If you operate any type of shared space, then you will know the conundrum: try to get people in the door while at the same time to keep your costs low.

If your line of business is something else, but you have empty, unprofitable space, then you'll be wondering if there is something you can do about it.

It's relatively easy to let people you know and trust into your space, but what about strangers?

Your space costs are fixed, so if you could extend your operating hours without increasing staff costs, then you'll increase your profits. Could you indeed operate without staff? Perhaps even operate 24 x7?

And if you could operate your space in this different way, then might you bring in a whole new class of customer?

All good questions: but before you earn anything, just how do you get people through your door?

IP Locks and how they are opened

The technology controlling physical access is based around something commonly called an IP lock. This in fact is an electrically-operated door bolt known as a "Strike" which connects to a "Door Controller". This then tells the strike when to open the door.

The IP Lock is created because the Door Controller is connected to a network, and is thus programmable.

The Door Controller operates upon presentation of a "Credential". No longer do we need physical keys, nowadays we open doors with fobs, proximity cards, a pin code. To be really up to date we can use a mobile phone, or in the future a 2D barcode or even a "gesture".

The really crucial part is, by virtue of the Internet, that the door lock is programmable in real time. The credential can be created and available in seconds by software applications far away. Better still, the credential can be valid for just as long as you want, and no longer.

The Key to self-management is, well, no Keys!

The best way to reduce costs is to get your customers to do the work, and often this is the best way to create new markets too. After all, we have become content to book our own flights, check ourselves in, and even print baggage labels.

DoorGuard with Medusa does the same for physical building access. So while regular users can have physical credentials such as cards as before, strangers can use pin codes or other non-tangible tokens.

So if we apply this thinking to the use physical space we change the inflexible traditional security approach “who is allowed to go where” into the Web 2.0 approach of “you can pay to go through this door – right now - if you want”?

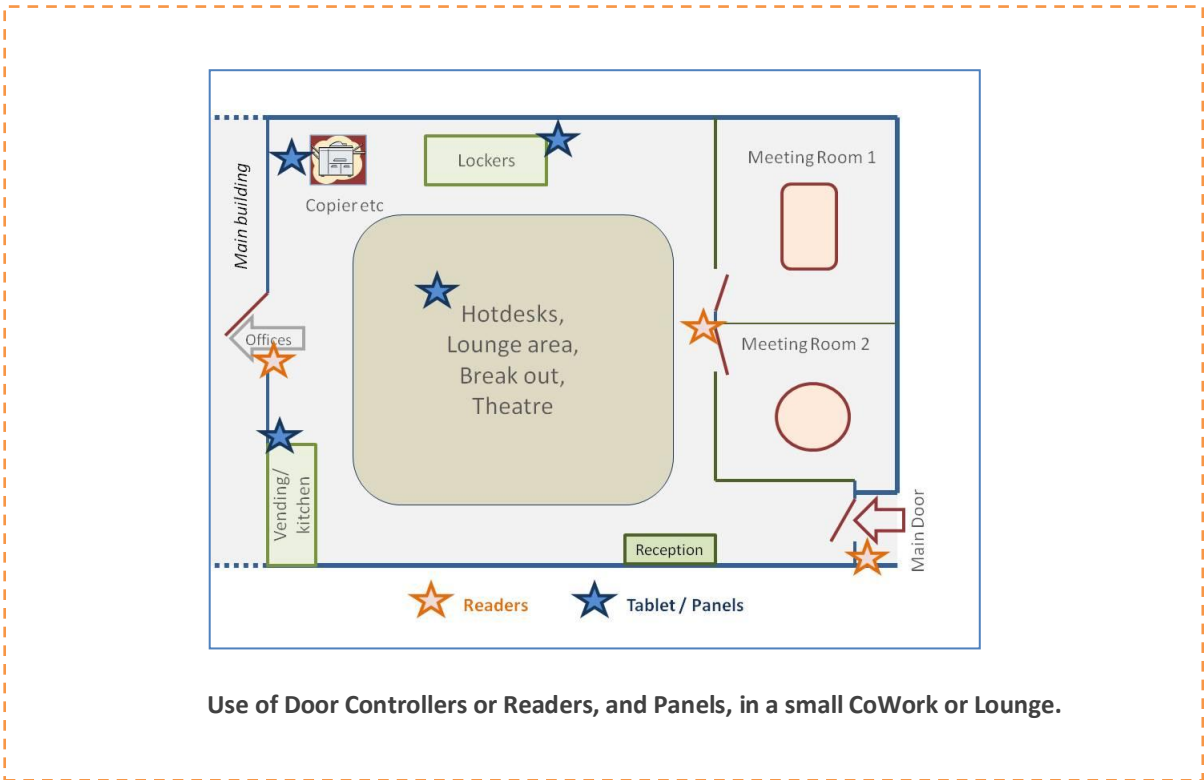
From Access to Billing – Consumption is self-managed too

With this technology, we also know about events, that is, when something happens. Technically this means recording who does what, where and when. While that is important for security, it generates a further benefit, the metering of consumption. Sometimes this is called “cashless payment”.

For time based metering, the presentation of a pin code or credential starts a clock. Customers can stop the clock when finished or we can use other methods to detect their activity. Equally if you are vending discrete units, the wave of a card can record – or permit - its consumption.

For instance, if your service plans offer 10, 20 or more hours of desk usage a month, then this is the ideal way to monitor actual usage.

Advance booking systems are good and generate revenue from meeting rooms etc. However it is also true that logging-on is a form of drag and resistance. Impulse is a human trait, and the instant use of a credential can log a customer’s consumption of many types of resources. Whether you use this to charge per use, offer an allowance, or just limit abuse, an electronic credential gives you the opportunity to offer new types of services and packages by linking access and resources to remote software.



Integration is the Key

Who or what can be authorised to program this lock with valid customers? Where is the knowledge kept?

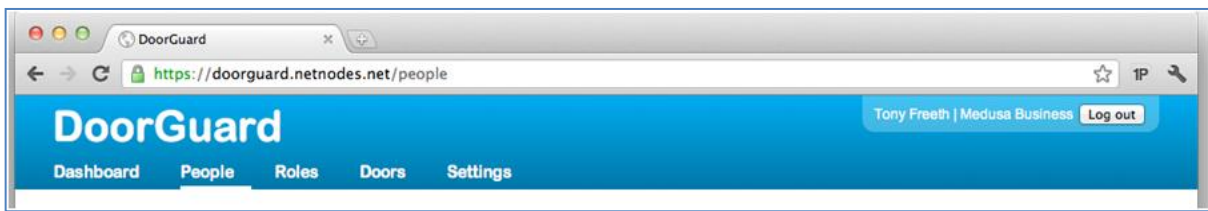
Through the use of APIs (commands that connect applications) just about anything you want can program the locks. This might be your own management software, or 3rd party billing software such as

Centre Charge. We can hook up smart phones to create accounts. There's even desk booking software available.

But in a world of Web 2.0, customers can buy their own access online and get the necessary credential. So an online marketing website or even a 3rd party site can do this. Also you can hook up to Google Apps (calendars etc) and similar cloud apps.

Then there are social media apps such as LiquidSpace that can market your space based on the potential customer's location.

So you should think about how you can integrate access control with your management software – it is probably simpler than you think.



DoorGuard Portal in the cloud manages, reports, and configures devices controlling access.

Structuring your Space: IP Enabled Space Services

We suggest you start off simply, but you can let your imagination run ahead and consider what you might do. Here are some things to consider:

CONTROL POINT	HOW TO USE
Front Door	Is your front door under your control or do you have a secondary door to permit access? External doors need additional security. Do you want a camera image capture of the person as they enter?
Zones	Once in your space, can everyone go anywhere or are you dividing your space into zones. Do you want to control access or just record the event?
Meeting Rooms, conference rooms, interview rooms, breakout space and other premium space	Functional space that you normally charge for. Are these booked via a booking system with controlled access or charged on a 'as you come' basis? On an equipment note, do you want to control displays/projectors/conferencing units or whiteboards?
Desks and workspace	Are there physical workspaces resources that you wish to charge for, and even on a menu of charges (eg, charge more for a window seat or a telephone booth)? A simple touch screen with a login is a low cost way to capture usage.
Points of Consumption -	You may have resources that are available to only some customers, or

Resource management	customers may have an allowance that you wish to monitor. This can be anything from showers, to storage, to a kitchen.
Integrated Equipment for consumption records and cashless payment.	Some equipment is easy to integrate, such as photocopiers or phones. Many Photocopiers have a card sensor attachment which makes integration easy. Host phones, vending systems can be connected.
WiFi	Of course we can integrate Medusa WiFi with the access credential for a single Pincode login. Tracking Internet usage by customer is legally important.

Understanding the Mechanics of IP Access

There are five essential elements to make this work. Medusa has integrated these to work seamlessly via its PlaceMaker range of appliances - so you don't have to worry about your local network..

Door Controller – this is a device that holds all the PIN Codes and knows which doors to open for which code. You need at least one per location.

Credentials – fobs and proximity cards, or even just a pin or a barcode. There are Door Controllers that accept a pincode and detect fobs. But there are also other ways for a customer to present a credential such as a smartphone.

Door strikes – powered by PoE, these actually open the door for the user. These connect to a Door Controller in the vicinity.

Medusa DoorGuard Gateway – this is the appliance that manages all your on-site access devices, and communicates with the Internet-based portal and the APIs. The appliance also manages your switches and other necessary infrastructure and can integrate with the trademark Medusa “Patchless” system. We’ve even kept our famous Green/Red instant status.

DoorGuard Portal – Cloud-based portal that allows you to manually or automatically set up customers and pin codes, and set up usage profiles of who, when, and where. It also provides an event log so you can see who did what when (quite literally if you use the camera option in release 2).

Flat Panels & Tablets

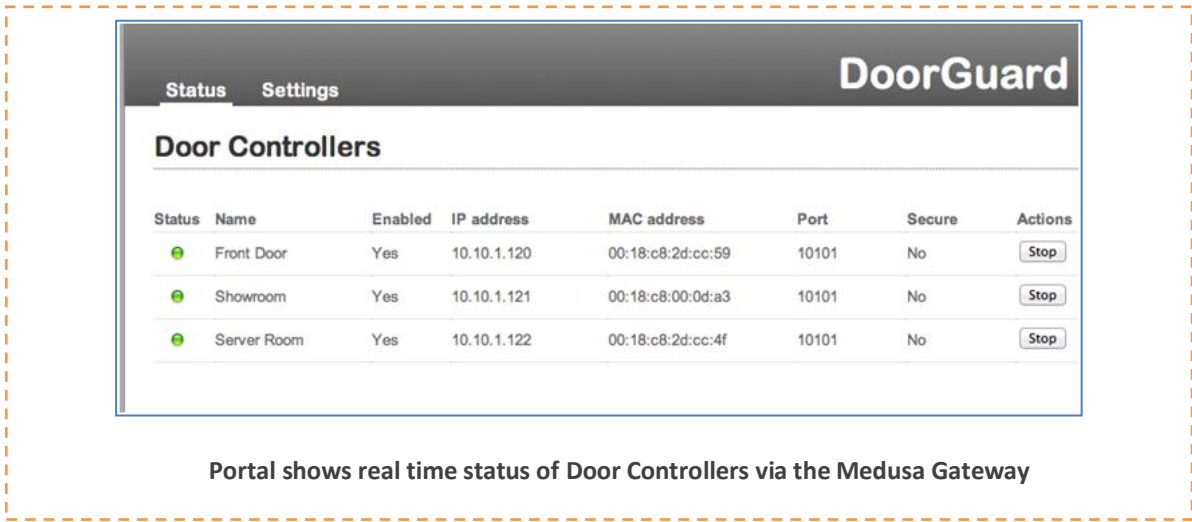
Use low cost 7inch and 10inch tablets for pin code entry. You can use this as a branding and way-finding or signage opportunity.

Enhancements (*release 2*)

Cameras - You may opt to use cameras as well both to capture images at time of access but also streaming so you can watch the location remotely.

Door panels – these are integrated camera / phones which can work with DoorGuard

Power Control – switch off/on devices.



Integration with Medusa - Other External Resources

There are in fact many other external resources that can be connected via the appliance. Resources under discussion include:

- Vending machines
- Furniture interactions
- HVACs (environmental control)
- Wayfinding, signage, touch screen
- Projection
- Remote reception.

We encourage Early Adopter programme members to communicate their own needs.

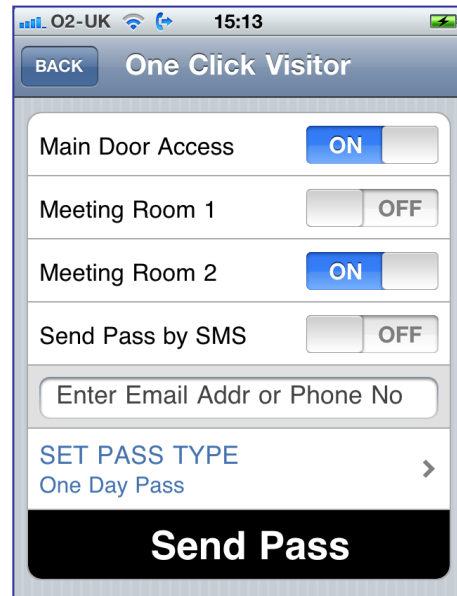
Example – One Click Access

Here is an example of what can be done.

The APP on the right can create a password that works with both WIFI and allows access to the building.

The PASS permits ONE DAY usage of the WiFi and access to the main door and Meeting Room 2.

The pass can be delivered by email or optionally by SMS if the mobile number is used in place of an email address.



Thinking Securely

Survivability

This technology has been designed with survivability in mind. Operation of locks is not dependent on the Internet, which is only used for reports and programming. The minimum to keep running will just depend on the operation of the local switch network or local power.

Security

Like all Medusa devices, network security is designed in to the fabric, and is not dependent on external or third party devices. We also arrange that the Internet cannot directly reach Door Controllers, or be reached though bypassing DoorGuard hardware.

Checklist

There are some aspects that you need to consider.

- Exterior doors – these need a special kit and ideally be installed by qualified locksmith.
- Internal override access, magnetic doors – consider what happens during a potential emergency.
- Standard or HID proximity. If you already have HID cards, these may be usable on DoorGuard.
- Fire arrangements need to be considered.
- Exit monitoring – do you need to record people leaving the premises? Not just for billing purposes but for fire or emergency recording?
- Power over Ethernet & switches – the devices are powered and managed over the local network. If this is not managed by Medusa then there are some questions you need to ask.
- Physical interference – if you have surface-lying cabling you may wish to secure this.
- Landlord issue in multitenant locations – the Landlord may or may not let you operate your own front door access. However it is easy to allow two systems to operate a common lock or strike.
- Visitor due-diligence. Use of a billing system or some social apps is the easiest way to verify the identity of visitors.

Recent Activity		
Door	Person	Event
Front Door	Emma Whitehall	Admit
Front Door	Bob Jones	Admit
Front Door	Unknown	Reject
Front Door	Rich Aston	Admit

Who's at your door? DoorGuard Portal keeps you informed.

PlaceMakers & DoorGuard – Getting Started

Early Adopter Programme for Shared Space

Medusa is a tried and tested shared-space technology which has been around for years. However our PlaceMakers range of appliances is new.

The technology for DoorGuard is also well established, but cloud based management is innovative and leading-edge in nature.

Our customers help us improve. We always seek to learn from user experience and traditionally have supported a number of Early Adopter locations, which in turn provide feedback leading to product modifications.

Because potential deployments are diverse in their nature, we anticipate that we will need a number of early adopters. The reward is that you get discounts, a lot of assistance, and access to our specialists. And, of course, you get to be first in the marketplace.

Entry Level Bundle

Medusa Gateway Appliance

Control of your DoorGuard devices exists on a Gateway-hosting Medusa appliance which is located on your premises. These are configured and managed from our portal, and appliances include many Medusa functions such switch management, diagnostics and reporting.

There are two appliances to choose from in this bundle and both support APIs:

- **DoorGuard Gateway Appliance** – a very small device which just looks after DoorGuard on site.
- **ThirdPlaceMaker** – a single appliance solution for CoWorks, Lounges, Hotdesks and other locations. Includes WiFi, Internet access, security, multizone network management, and everything else you need to operate a cowork infrastructure.

What have we done? Medusa + DoorGuard

“...and whose job is it to make all this work?”
Well, that would be us.

The Medusa Gateway appliance sits between the Internet and the access devices on your doors.

Medusa automatically creates a secure yet configurable network for these devices. On the public side, it communicates securely on a trusted basis with the DoorGuard Portal in the cloud. Without our appliance your devices are hard to locate and manage, and worse, easy to intercept.

But on this appliance we further integrate with the many other onsite and offsite functionalities you require to operate your space.

Just drop in the Medusa Appliance, connect up, and the system is ready to go live.



DoorGuard Devices

The bundle package will get you started to control an internal door. This includes

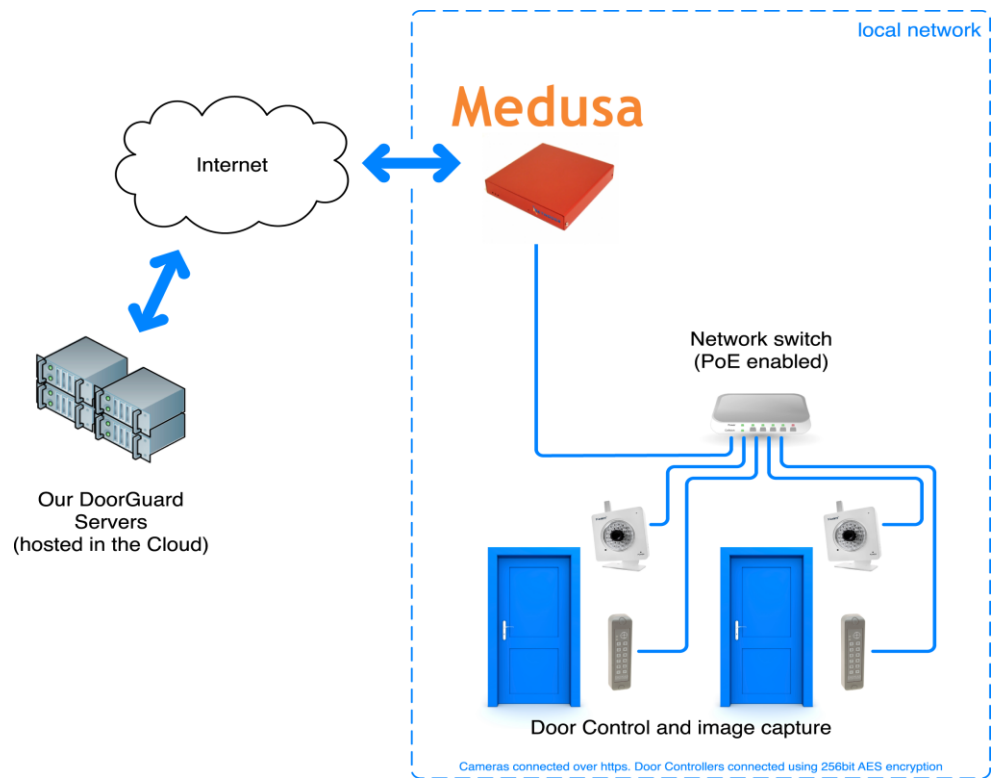
- Door Controller (specify Standard or HID)
- 1 door electric strike
- Printed card example pack
- Optional IP camera

Evaluation Portal Accounts

A combined Medusa and DoorGuard portal account is provided:

- Free Medusa Appliance portal account
- 5 Free users on DoorGuard Portal

There are discounts on additional users and higher level Medusa Appliances such as ThirdPlaceMaker.



Contact to get started: info@thirdplacemakers.com

Look also for the Whitepaper on the ThirdPlaceMaker appliance.

DoorGuard™ is a trademark of Netnodes Ltd. Patchless™, PlaceMakers, MedusaBusiness are trademark of Phoenix Broadband Ltd. Medusa is a brand of Phoenix Broadband Ltd