

# Kiosk Applications and Apple Mobile Device Management

**Florent Pillet**

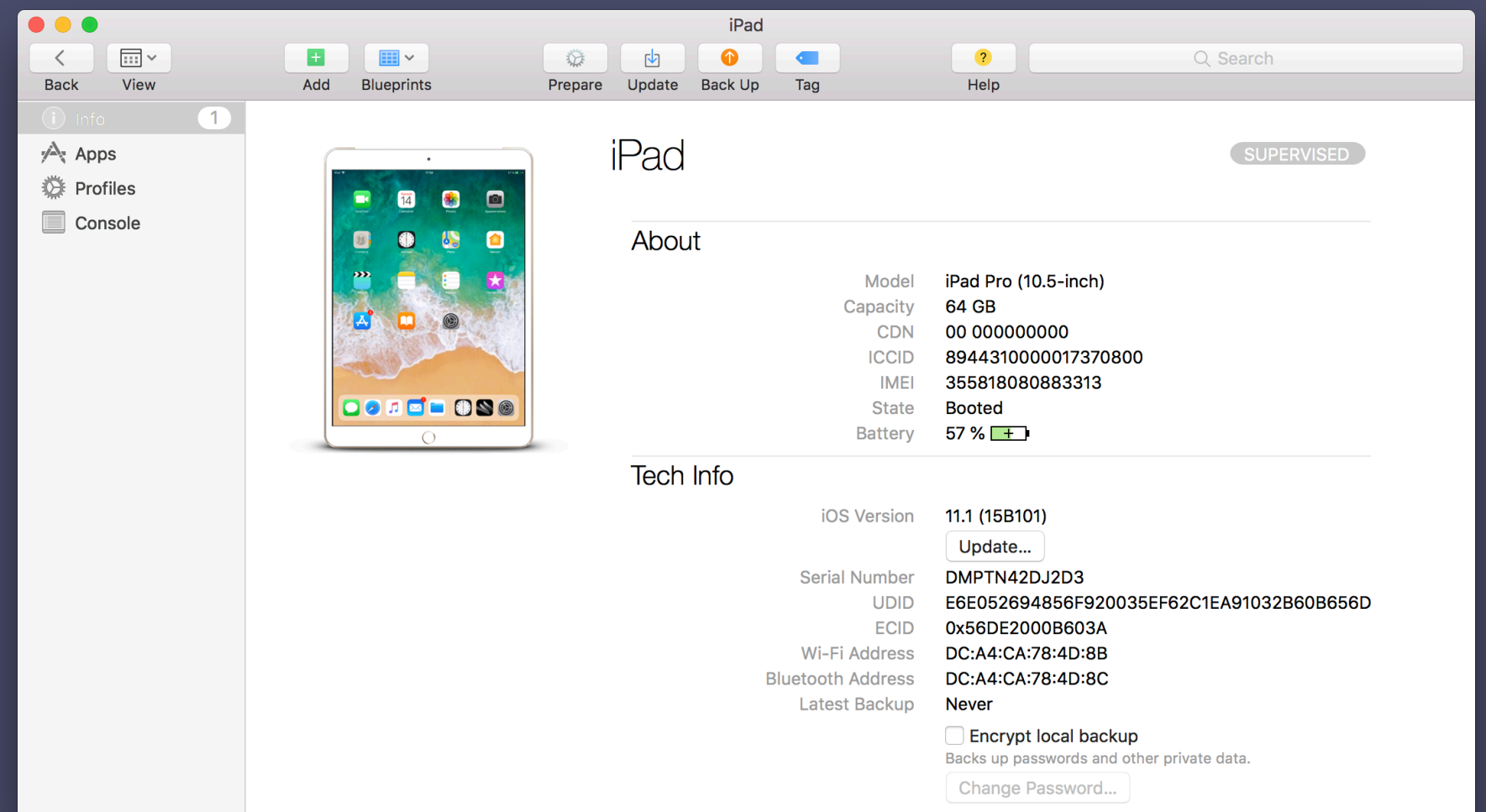
AppBuilders 2018 - Lugano 

# Kiosk Applications

- Single-purpose devices
- Home automation
- Hospitality
- Public displays

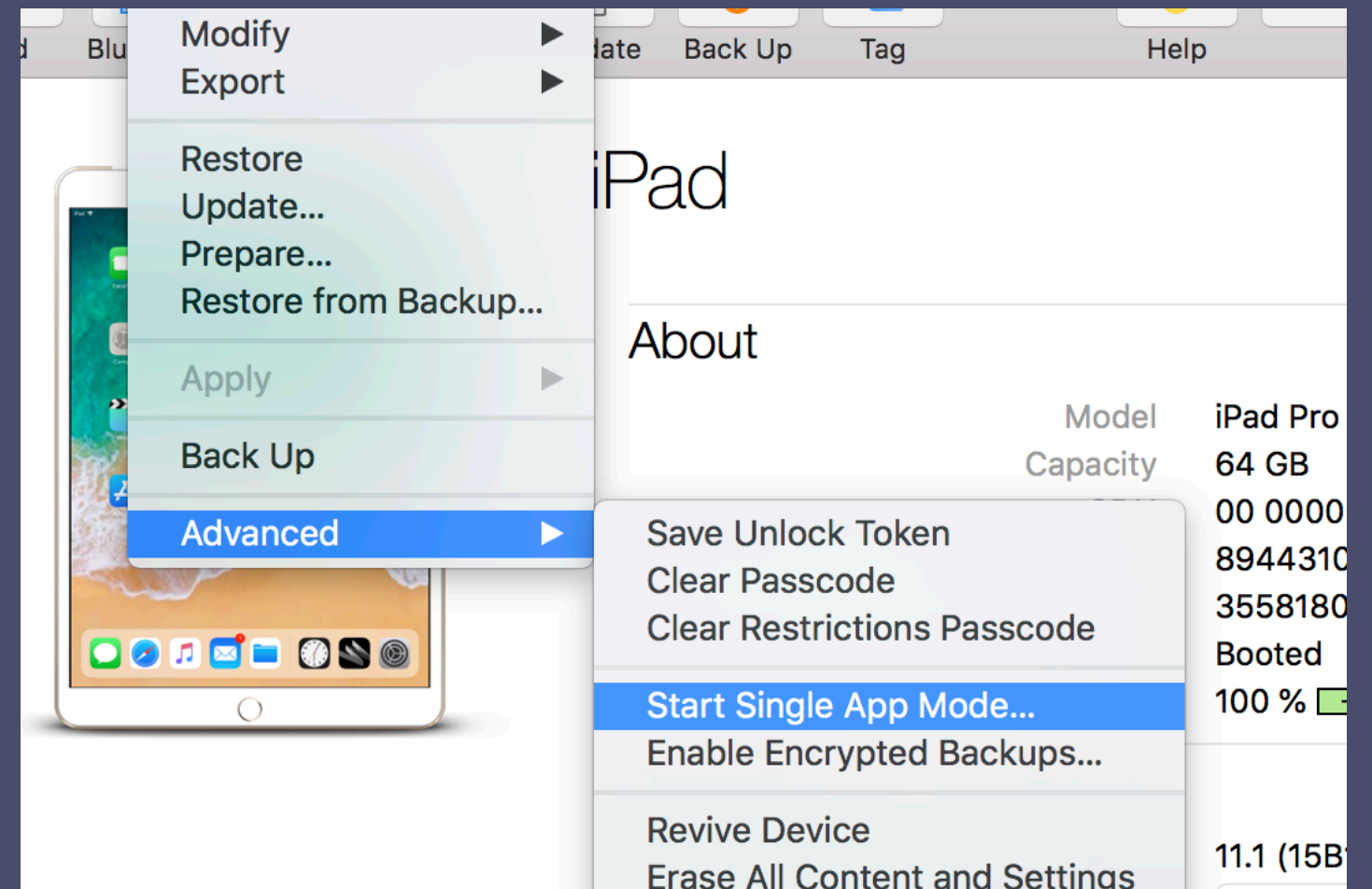
# Starter setup

- Apple Configurator 2



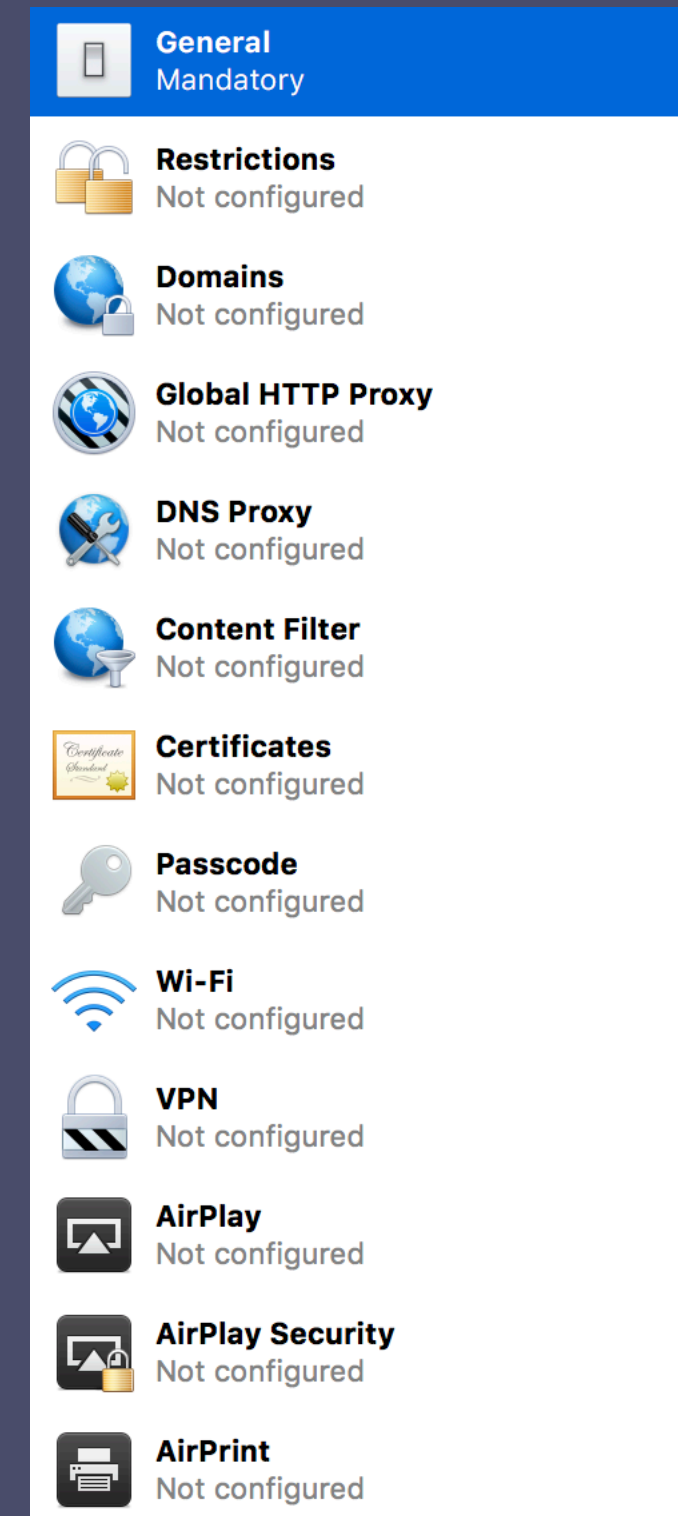
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- Apple Configurator 2
- Single-App mode



















# Starter setup

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- Locked WiFi, certs, VPN...



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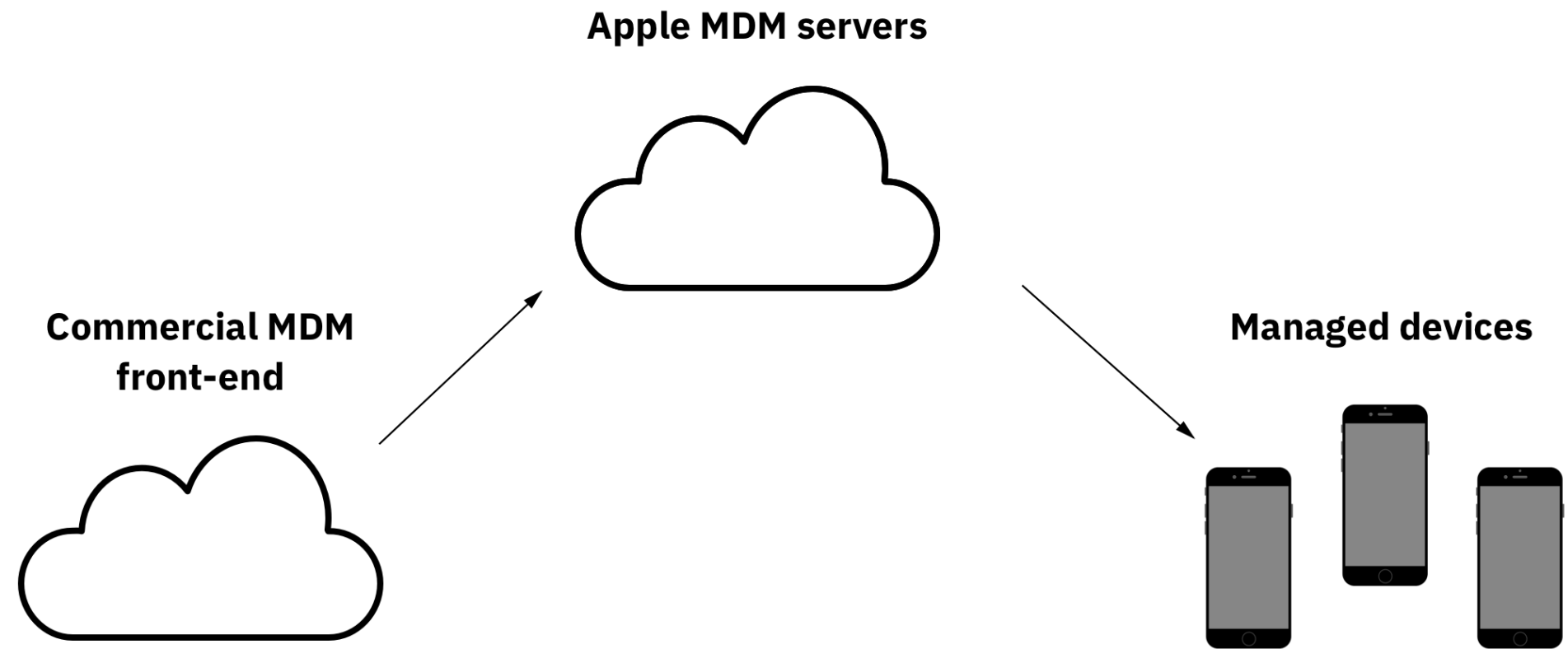
	<b>Calendar</b> Not configured
	<b>Subscribed Calendars</b> Not configured
	<b>Contacts</b> Not configured
	<b>Exchange ActiveSync</b> Not configured
	<b>Google Account</b> Not configured
	<b>LDAP</b> Not configured
	<b>Mail</b> Not configured
	<b>macOS Server Account</b> Not configured
	<b>SCEP</b> Not configured
	<b>Cellular</b> Not configured
	<b>Fonts</b> Not configured
	<b>Notifications</b> Not configured
	<b>Conference Room Display</b> Not configured
	<b>TV Remote</b> Not configured
	<b>Lock Screen Message</b> Not configured
	<b>Web Clips</b> Not configured

# Starter setup

- Apple Configurator 2
- Single-App mode
- Locked WiFi
- Ad-Hoc provisioning profile

# Mobile Device Management (MDM)

For iOS, tvOS and macOS





# Mobile Device Management (MDM)

For iOS, tvOS and macOS

- Enterprise fleets
- School devices
- Kiosk applications

# Enroll

- Must be a company
- Enroll on [deploy.apple.com](https://deploy.apple.com)

# MDM servers

- Commercial products (SimpleMDM, AirWatch, JAMF...)
- Roll your own (microMDM open-source)

# Customizing app settings

- Use managed user defaults to configure each device

```
let MANAGED_KEY = "com.apple.configuration.managed"
```

```
extension UserDefaults {
```

```
    func managedConfiguration() -> [String:Any]? {  
        return object(forKey: MANAGED_KEY)  
            as? [String:Any]
```

```
    }
```

```
}
```

# Pitfalls

- Sign apps with Enterprise or Ad-Hoc cert (new)

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- iPad WiFi unreliable: use cellular or Ethernet (here: Redpark PoE adapter)



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- Sign apps with Enterprise or Ad-Hoc cert (new)
- iPad WiFi unreliable: use cellular or Ethernet
- Remote update: switch away from your app first
- Wake from sleep requires button press



# Thank you

- Deployment reference: [help.apple.com/deployment/ios/](https://help.apple.com/deployment/ios/)
- Enroll into MDM: [deploy.apple.com](https://deploy.apple.com)
- [MDM protocol reference](#)
- Some commercial MDM solutions: SimpleMDM, VMWare Airwatch, JAMF
- Power over Ethernet (PoE adaptors): Apple, [Redpark](#), others

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