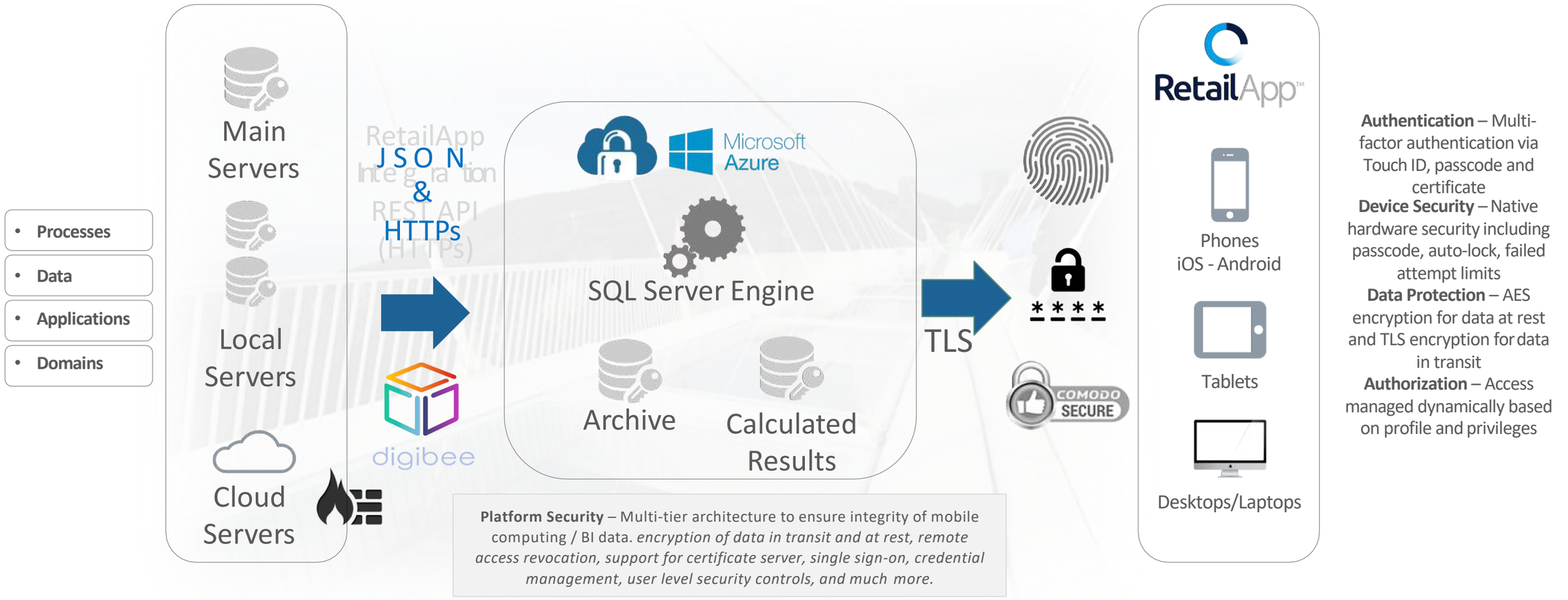
RetailApp Azure Integration

Enterprise Ready Continuous Integration

- Same language in 100% of the organization
- Social interaction KPI centric
- Answers in an instant
- Secures information (no third parties sharing)
- Scales and distributes to thousands
- Single version of the truth
- Integrates views across data sources
- Personalizes experiences
- Runs business with insight and action
- Monitors in real-time



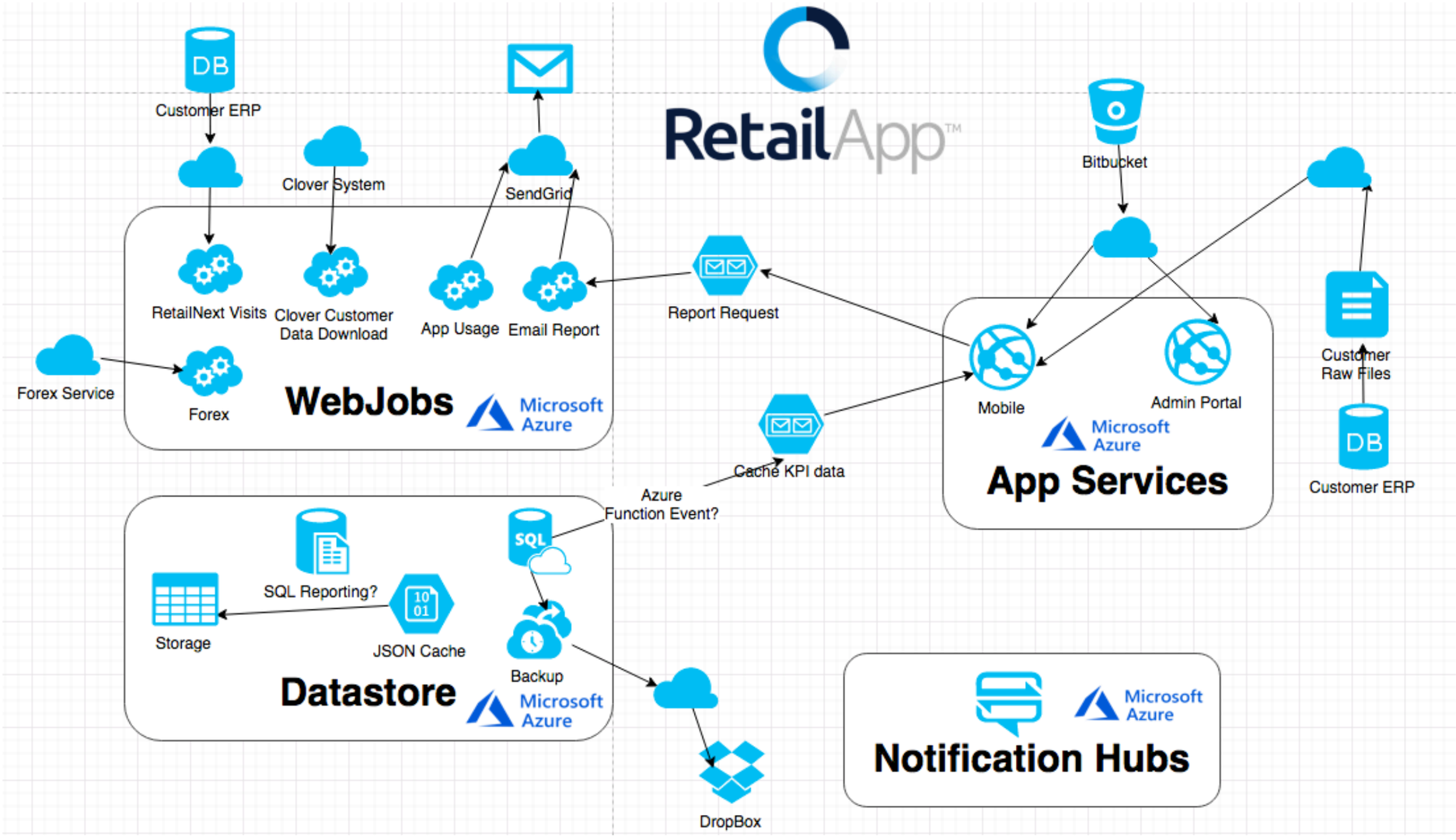
Enterprise Assets

RetailApp Enterprise Platform

Physical systems

RetailApp

Architecture High Level



RetailApp™

Security Features

RetailApp™ provides out of the box security features

Essentially, your data is *encrypted* and transferred from the Point of Sales (POS) to the Microsoft Azure Datacenter, where it is *securely* processed, and then *encrypted* and transmitted to **RetailApp™** on mobile or desktop devices.

- All data transports are encrypted.
- Access through login and password.
- Data encryption within the app.
- User logging management.
- User administration.
- Microsoft Security Certificates.

In addition to these *standard* security features, **RetailApp** will work hand-in-hand with every customer in order to meet any further *specific* security requirements.

From POS/Datacenter to RetailApp (Microsoft Azure)

The communication between the POS and the datacenter can be done through:

- Application's Programmer Interface (API).
- Secure File Transfer Protocol (sFTP).

The security of the data in transit is tied to the method used.

Microsoft Azure

Trust is an important part of our business and was one of the key consideration points when designing the **RetailApp™** platform. This was one of the reasons we decided that Microsoft Azure was the appropriate choice:

- Microsoft Azure datacenters offer redundancy and disaster recovery.
- Data can be stored and replicated across multiple locations to ensure that it is safe, securing against everything from hardware failure to natural disaster.
- The data center locations also physically secure too, with smart surveillance and trained security guards 24x7, access to the data centers is strictly controlled using multi-factor access.
- Microsoft Azure handles TLS 1.2 and above.

Azure is used by companies like Lufthansa, Accuweather, NBC News, Toyota and many others.

Cryptographic Certificate

- The **RetailApp™** backend system uses **Public Key Cryptography Standard** version 1.5 (PKCS#7, RFC 2315).
- By using a *Public Key Infrastructure* (PKI) all communications between **RetailApp™**, the Admin portal and with Azure are *signed* and *encrypted*.

From Microsoft Azure to Mobile

- For both iOS (Transmitting Data Securely) and Android (Android SSLSocket) platforms, **Transport Layer Security** (TLS) version 1.2 (RFC 5246) is used for the transport of communication to and from the Azure backend.
- TLS uses X.509 (RFC 5280) asymmetric cryptographic certificates, in order to secure data.

How the Data is Handled in the Mobile Apps

- **Android** (Android Keystore System) will store local cache using the *Android KeyChain*. Android uses a **X.509 certificate** (generated by Android) and encrypts using **RSA private -public key asymmetric encryption** (RFC 2437) at the software level.
- **iOS** (iOS Security) will store local cache using the *Apple iOS KeyChain*. iOS uses **AES symmetric encryption** (RFC 3565) using the **pbkdf2 algorithm** (RFC 2898) which performs 10,000 iterations with the user's passcode at the hardware level to generate the AES key.
- Every user must authenticate with a **User ID** and *complex* **Password** in order to gain access to the app.

Human Layer

- Only a few select, qualified and authorized personnel are allowed access to servers when necessary for system management, maintenance, monitoring, and backups.
- We follow rigorous hiring practices and every administrative, IT, support and sales candidate undergoes a background check.
- Our support engineers may only access your account when explicitly authorized by you to resolve problems or issues reported by you or to address issues for which we are contractually authorized.
- All account logins are tracked for reference.

RetailApp™