

Head In The Clouds

A Tour Of Azure Mobile Services With Xamarin



About Me ... Matt



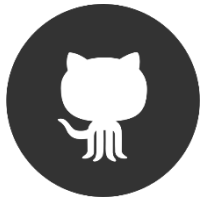
msoucoup@codemilltech.com



codemilltech.com



@codemillmatt



github.com/codemillmatt/DevDays



<http://bit.ly/MSN-MOBILE>

Head In The Clouds

Overview

- Gazing Skyward
- Floating Upwards
- Soaring Away



Head In The Clouds

Part 1: Gazing Skyward

- What's Azure?
- Azure For Mobile
- Why Azure With Xamarin?



What's an "Azure"?

- Microsoft's cloud offering
- Host
 - Websites
 - Cloud Services
 - Virtual Machines
- Data
 - SQL Server
 - BLOB
 - Table
- Tons of others
 - CDN, Machine Learning, Media Services, Caching, Visual Studio Online



Azure Mobile Services

What Does Azure Give The Mobile Dev?

- Platform as a Service (PaaS)
- Data
 - SQL Server
- Offline sync / conflict resolution
- REST API
- Scheduled jobs
- Push notifications
- User authentication
- Large scale storage

Azure and Xamarin

- DLLs via NuGet!
 - Most PCL
- Fulfills the Xamarin X-Plat promise
- Xamarin Forms and Traditional
- It just works



Head In The Clouds

Part 2: Floating Upwards

- Integrating Azure with Xamarin
- Azure Online Storage



Wisconsin Flavored Demo...



Wisconsin Flavored Demo...



CHEESED!



Integrating Azure Mobile Services

- Simple as a NuGet!
- Keep the same POCO models!
 - (but need an “id” column)
- Write code!



```
▼ C Cheese
  P string Cheeseld
  P string CheeseName
  P string DairyName
  P DateTime DateAdded
  M Cheese()
```

Gateway to the Clouds

- MobileServiceClient
 - Everything runs through this class
- Strongly typed operations
 - Linq!
 - Asynchronous!
- Sends HTTP requests

```
_client = new MobileServiceClient ("https://cheesed-devdays.azure-mobile.net",  
await _client.GetTable<Rating> ().InsertAsync (ratedCheese);
```

Head In The Clouds

Part 3: Soaring Away

- Offline Editing
- Synchronization

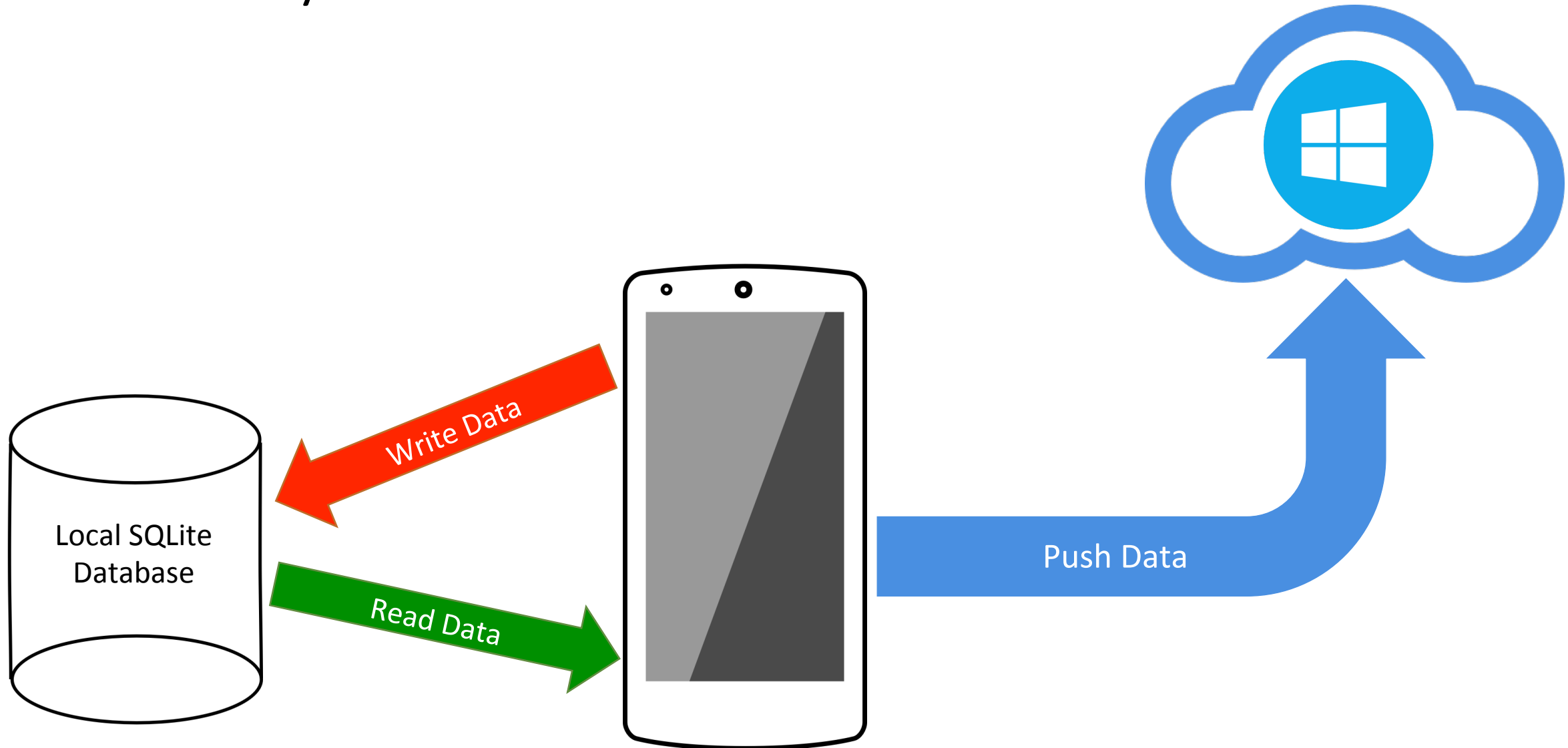


Offline Editing

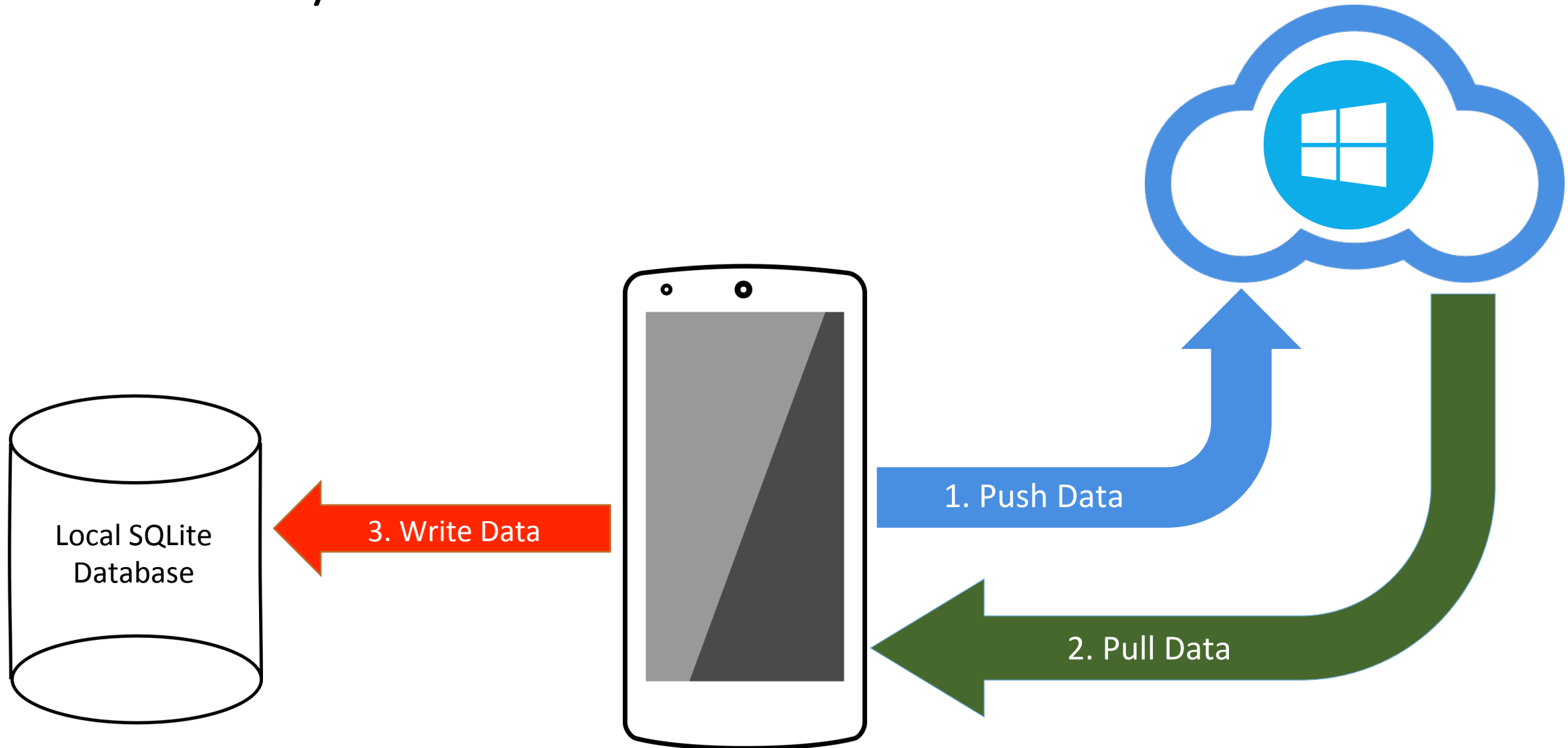
- Local SQLite database
- Data only sent to Azure when “pushed”
- Specific data grabbed from Azure when “pulled”
 - A “pull” always initiates a “push”



Synchronization - Push Process



Synchronization – Pull Process



Head In The Clouds

Floating Back To Earth

- Azure massive cloud offering
- Full featured mobile PaaS
- Easy integration with Xamarin
- Online tables, offline editing and synchronization



About Me ... Matt



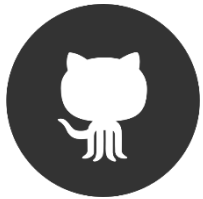
msoucoup@codemilltech.com



codemilltech.com



@codemillmatt



github.com/codemillmatt/DevDays



<http://bit.ly/MSN-MOBILE>