

# M1 Use Cases Enablement (Phase 1) – App: Data Layer Requirements

---

This document will focus on the creation of a data layer object (within screens on the native app), as well as the declaration of variables to sit inside that data layer object.

## Design

Within the Tealium native app initialisation script (i.e. the already implemented Tracking Helper Class, like shown below), we should declare the data layer variable key-value pairs to be collected.

```
class TealiumHelper {
    static let shared = TealiumHelper()
    let config = TealiumConfig(account: "ACCOUNT",
                               profile: "PROFILE",
                               environment: "ENVIRONMENT",
                               datasource: "DATASOURCE")

    var tealium: Tealium?

    private init() {

        // add necessary config options
        config.batchingEnabled = true
        config.logLevel = .debug

        // add desired Collectors – no need to include if want all
        // compiled collectors
        config.collectors = [Collectors.Lifecycle,
                             Collectors.Location,
                             Collectors.VisitorService]

        // add desired Dispatchers – no need to include if want compiled
        // dispatchers
        config.dispatchers = [Dispatchers.TagManagement,
                              Dispatchers.RemoteCommands]

        tealium = Tealium(config: config)

        tealium?.dataLayer.add(key: "emailToken", value: "<TOKENIZED-EMAIL-VALUE> or null", expiry: .untilRestart)
        tealium?.dataLayer.add(key: "emailHash", value: "<HASHED-VALUE> or null", expiry: .untilRestart)

    }

    public func start() {
        _ = TealiumHelper.shared
    }
}
```

```

class func trackView(title: String, data: [String: Any]?) {
    let tealView = TealiumView(title, dataLayer: data)
    TealiumHelper.shared.tealium?.track(tealView)
}

class func trackEvent(title: String, data: [String: Any]?) {
    let tealEvent = TealiumEvent(title, dataLayer: data)
    TealiumHelper.shared.tealium?.track(tealEvent)
}
}

```

## Implementation

The following provides a list of the variables required (and required variable syntax) for ALL SCREENS on the native app platform:

### emailToken - Email ID Token (Salesforce/Mulesoft-generated)

This field returns the tokenized output value of the user's email address. Tokenization is done in Mulesoft/Salesforce. The value to populate here should be the tokenized email address value only, without any prefixes or suffixes.

```
tealium?.dataLayer.add(key: "emailToken", value: "<TOKENIZED-EMAIL-VALUE>", expiry: .untilRestart)
```

If the user is not logged in, populate the variable with the null value (string): "null".

```
tealium?.dataLayer.add(key: "emailToken", value: "null", expiry: .untilRestart)
```

### emailHash - Email ID Hash

This field returns the hashed output value of the user's email address, using the same hashing algorithm as the Salesforce account (SHA-256). The value to populate here should be the SHA-256 hashed email address value only, without any prefixes or suffixes.

```
tealium?.dataLayer.add(key: "emailHash", value: "<HASHED-VALUE>", expiry: .untilRestart)
```

If the user is not logged in, populate the variable with the null value (string): "null".

```
tealium?.dataLayer.add(key: "emailHash", value: "null", expiry:  
    .untilRestart)
```

## Resources

- [Tealium docs - iOS Swift - Quick start](#)
- [Tealium docs - iOS Swift - Data Layer](#)