



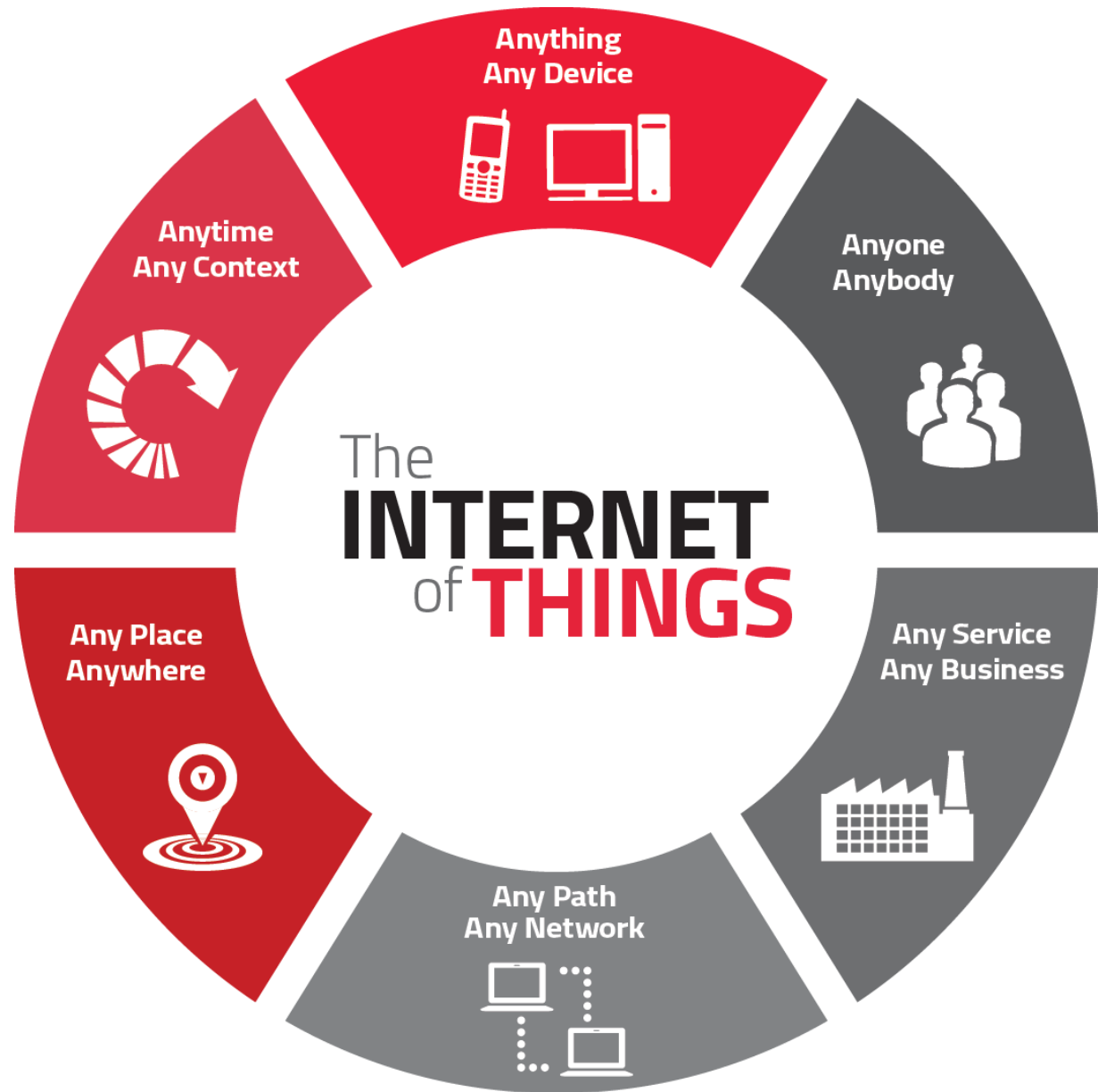
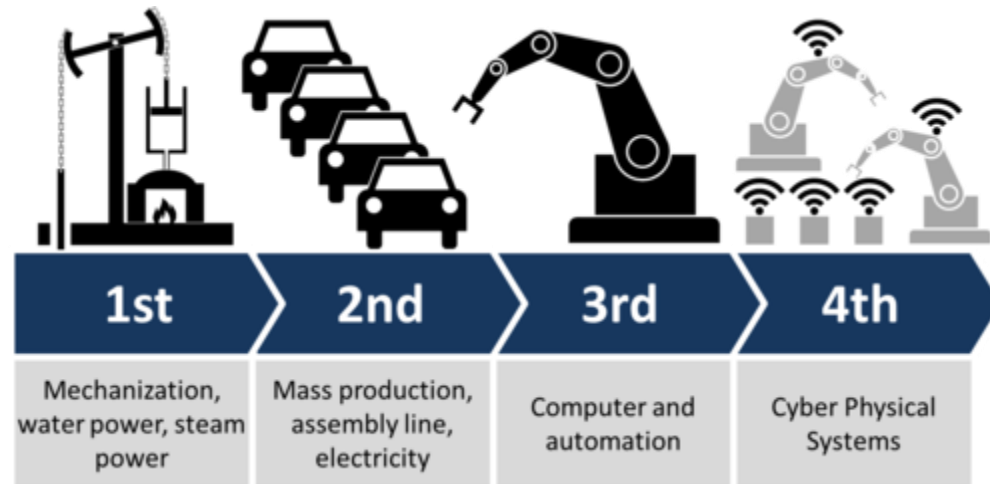
UNIFACE FACE

6th June 2018
Jason Huggins
Director, Global Delivery

Agenda

▲ Why IoT

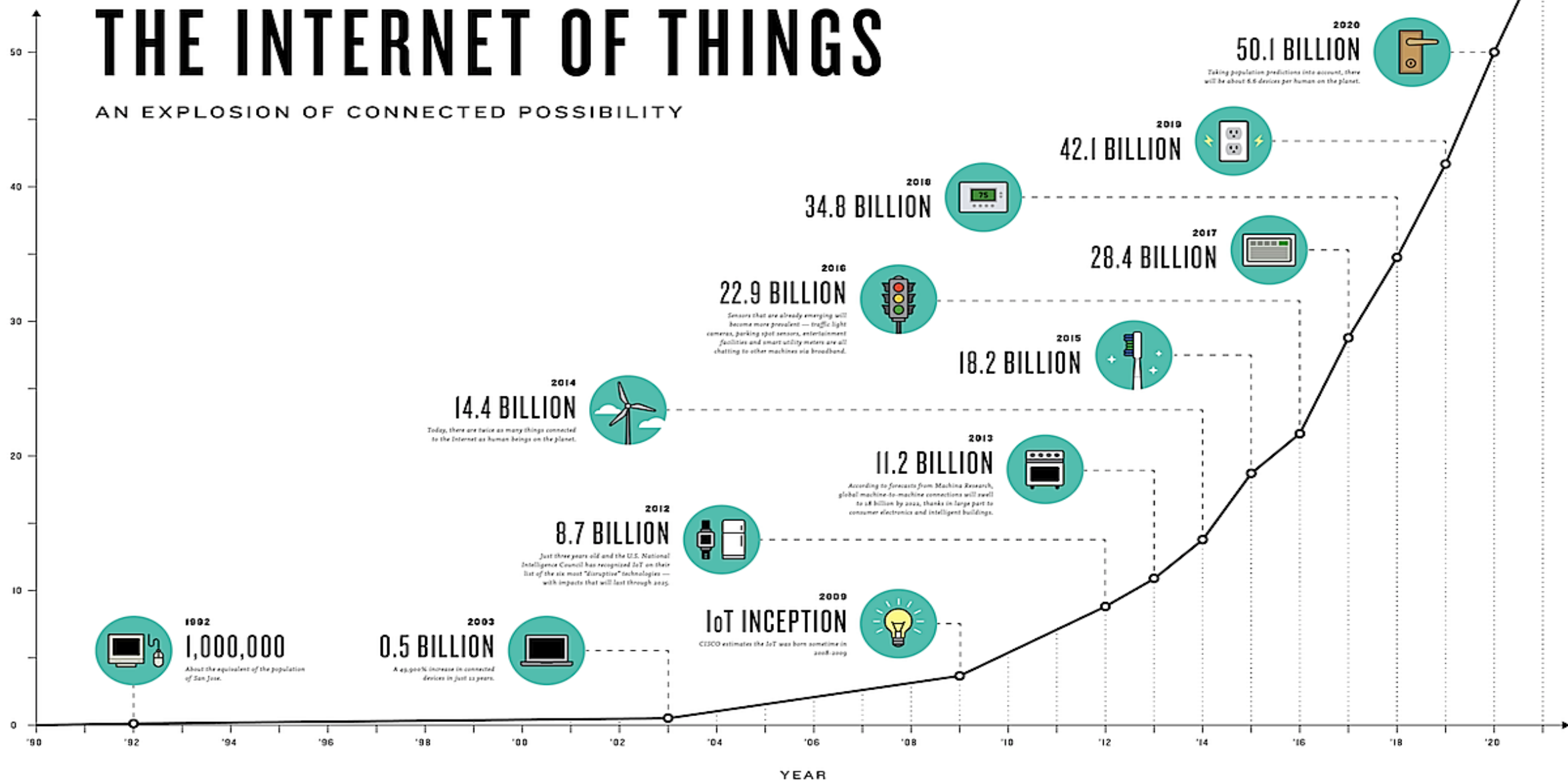
▲ Uniface IoT



THE INTERNET OF THINGS

AN EXPLOSION OF CONNECTED POSSIBILITY

BILLIONS OF DEVICES



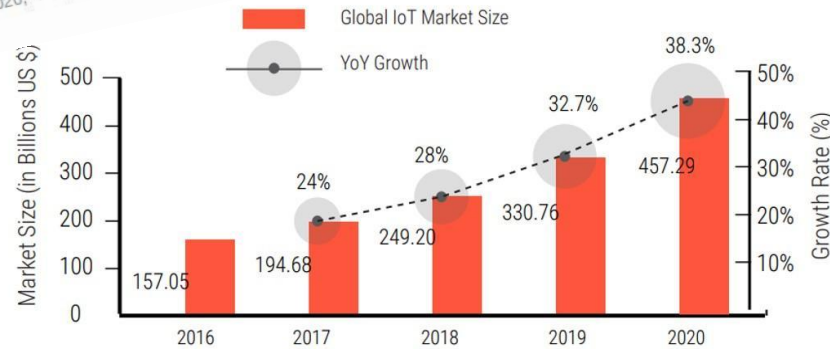
Analyst projections

Figure 1: Forecasted worldwide IoT revenue by technology element in 2020

Investment in IoT solutions: An exponential growth path

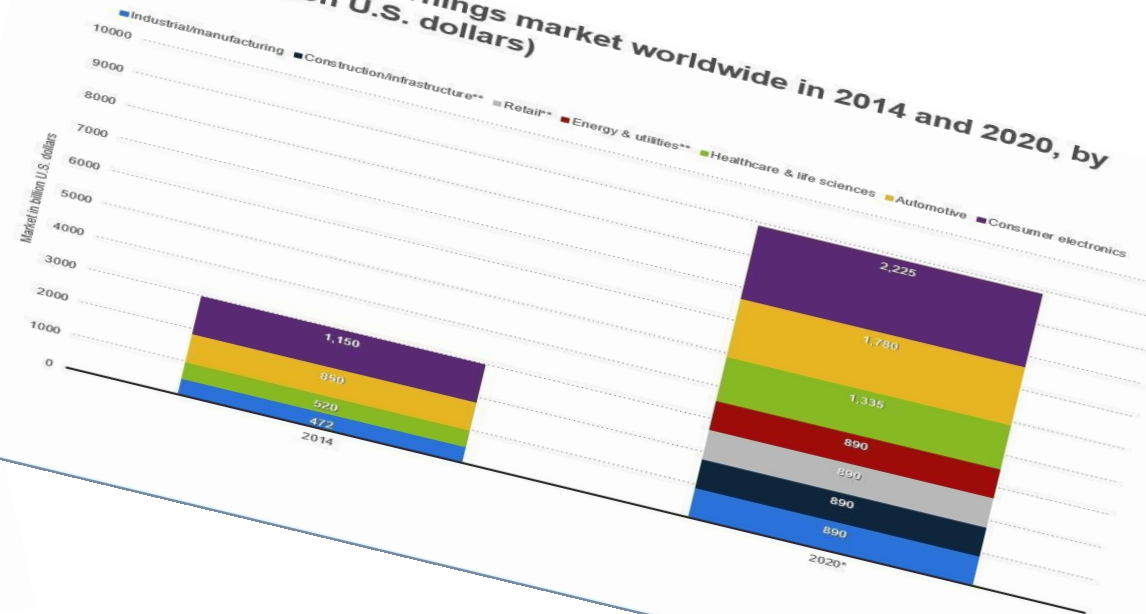
- According to current projections:
 - A cumulative total of US\$6 trillion will be spent on IoT solutions between 2015 and 2020.
 - IoT investments by businesses will grow from US\$215 billion in 2015 to US\$832 billion in 2020, while consumer spending on IoT solutions will rise from US\$72 billion to US\$236 billion.
 - According to IDC, the IoT marketplace will be worth US\$1.7 trillion in 2020, with the biggest portion being hardware, followed by services, connectivity and software.

Sources: "IDC's Worldwide Internet of Things Taxonomy, 2015," IDC, May 2015;
"Worldwide Internet of Things Forecast, 2015 – 2020," IDC, May 2015.

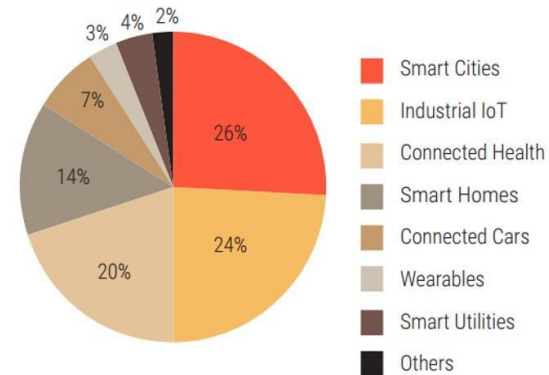


[Sources: GrowthEnabler Analysis/MarketsandMarkets]

Size of the Internet of Things market worldwide in 2014 and 2020, by industry (in billion U.S. dollars)

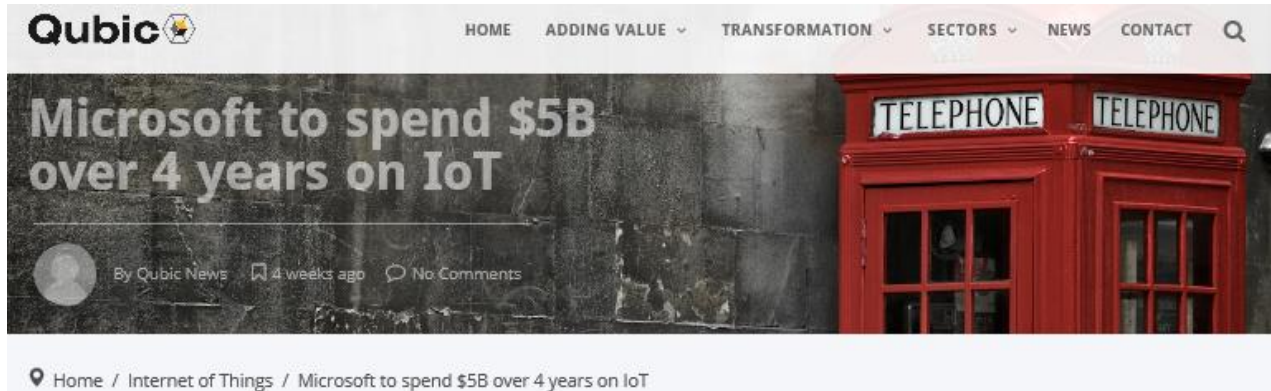


Global IoT Market Share by Sub-Sector



[Source: GrowthEnabler Analysis]

Significant Investment (...to name just a few!)



You Retweeted



Pentacle The VBS
@PentacleTheVBS

The FED4SAE call for applications is awarding SMEs up to €60,000 in funding to develop innovative cyber-physical systems (CPS) products. Not sure whether your IoT solution involves CPS? Integr... lnkd.in/eCVxEet

4:21 pm · 24 Nov 17



A Uniface Example

UNIFACE

Components parts of IoT



Physical Device

- Software/Firmware
- Sensors
- Actuators
- Connectivity



Data

- Capture
- Analytics
- Reporting
- Manage

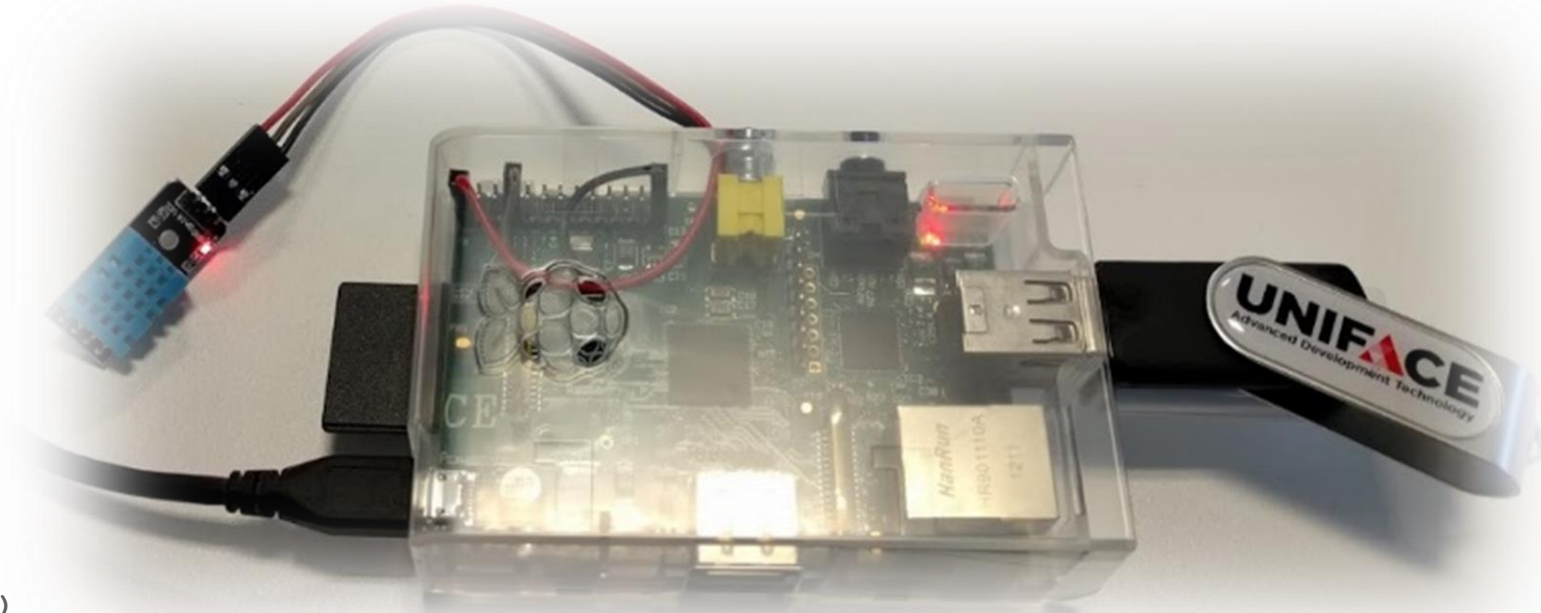


Business Value

- Monitor
- Control
- Optimise
- Automate



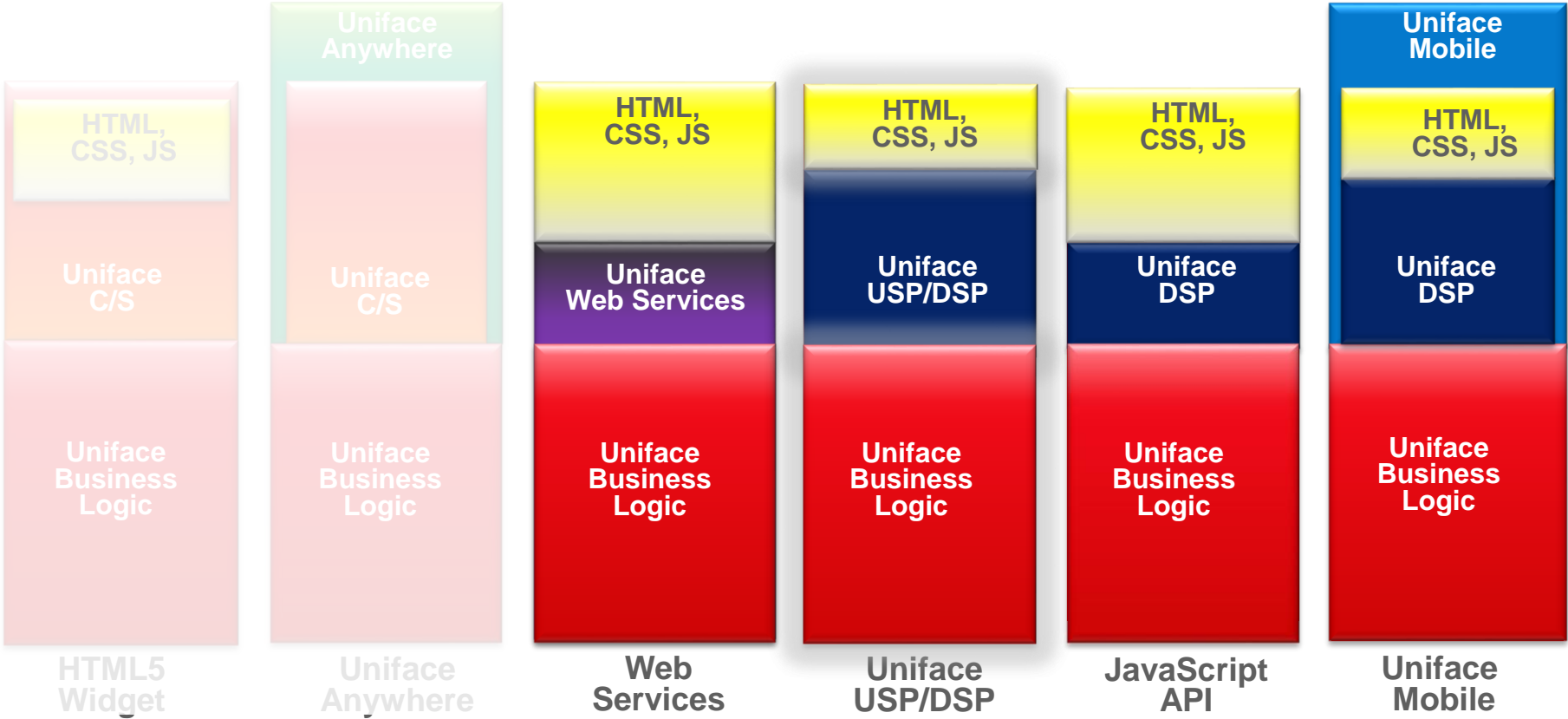
The IoT Device



```
int postData(char *payload)
{
    ...
    curl = curl_easy_init();
    if(curl) {
        /* First set the URL that is about to receive our POST. This URL can
        just as well be a https:// URL if that is what should receive the
        data. */
        curl_easy_setopt(curl, CURLOPT_URL, "https://showcase.uniface.com/UniIOT/web/uiot/add/sample");
        /* Now specify the POST data */
        curl_easy_setopt(curl, CURLOPT_POSTFIELDS, payload);

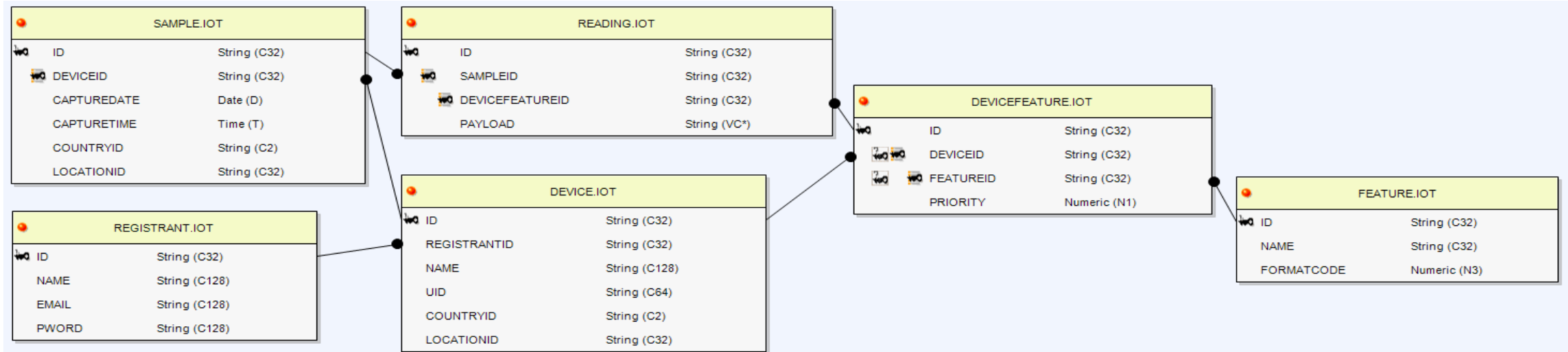
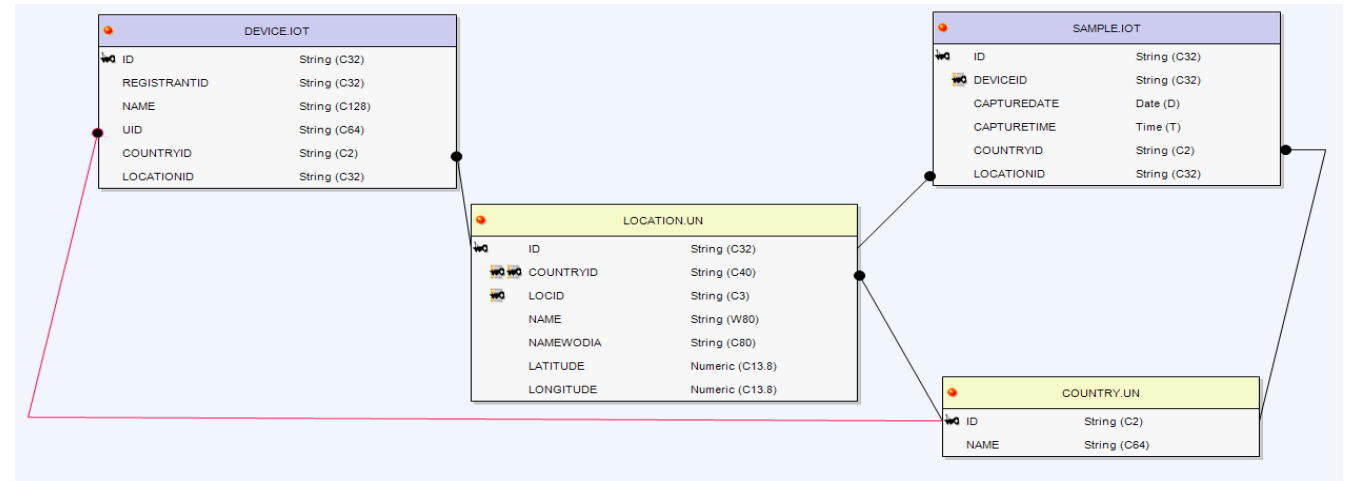
        /* Perform the request, res will get the return code */
        res = curl_easy_perform(curl);
        printf("%s", res);
    }
    ...
}
```


Uniface Solution

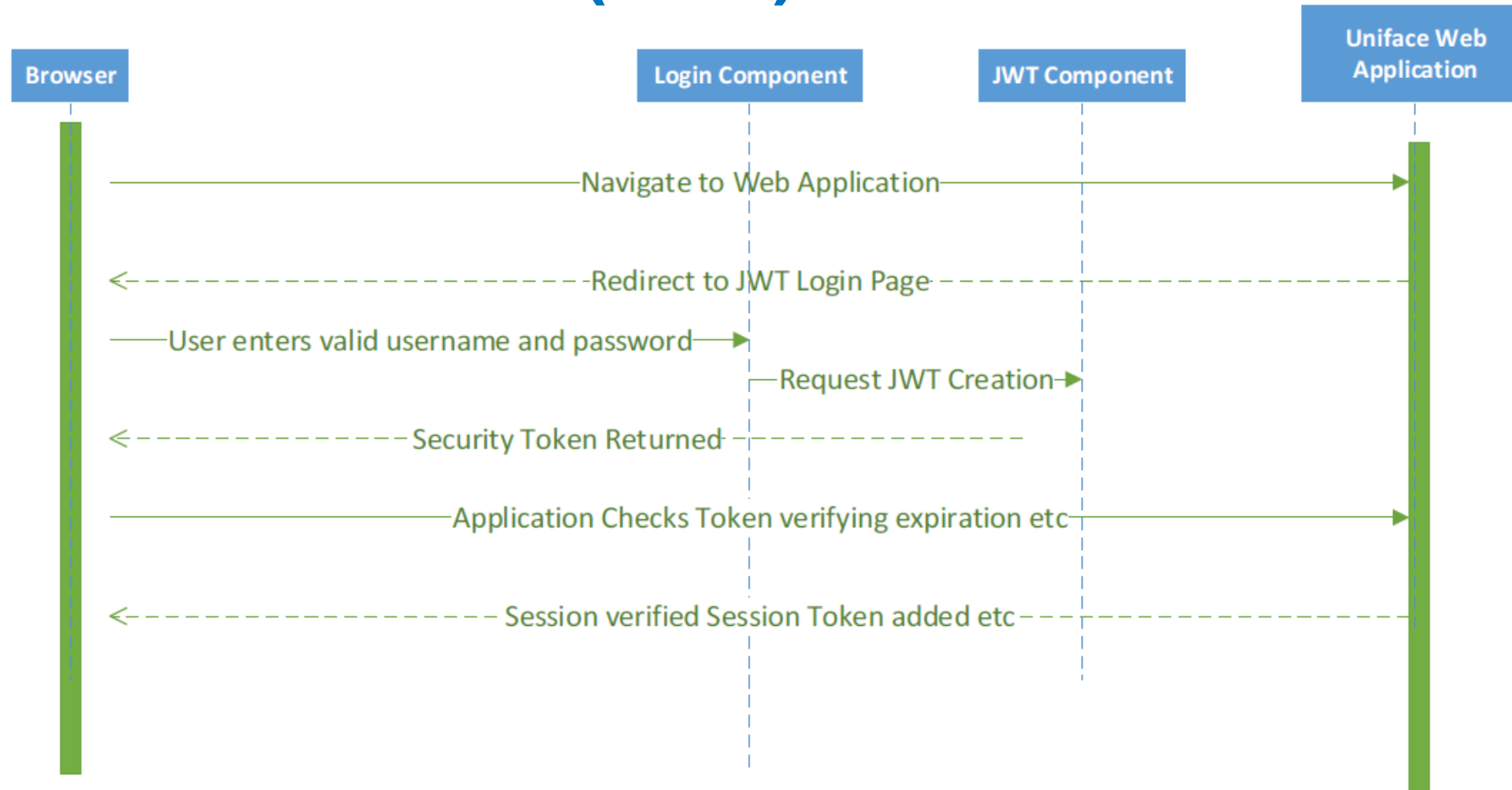


Normal Uniface Development

Flexible multipurpose data model



JSON Web Tokens (JWT)



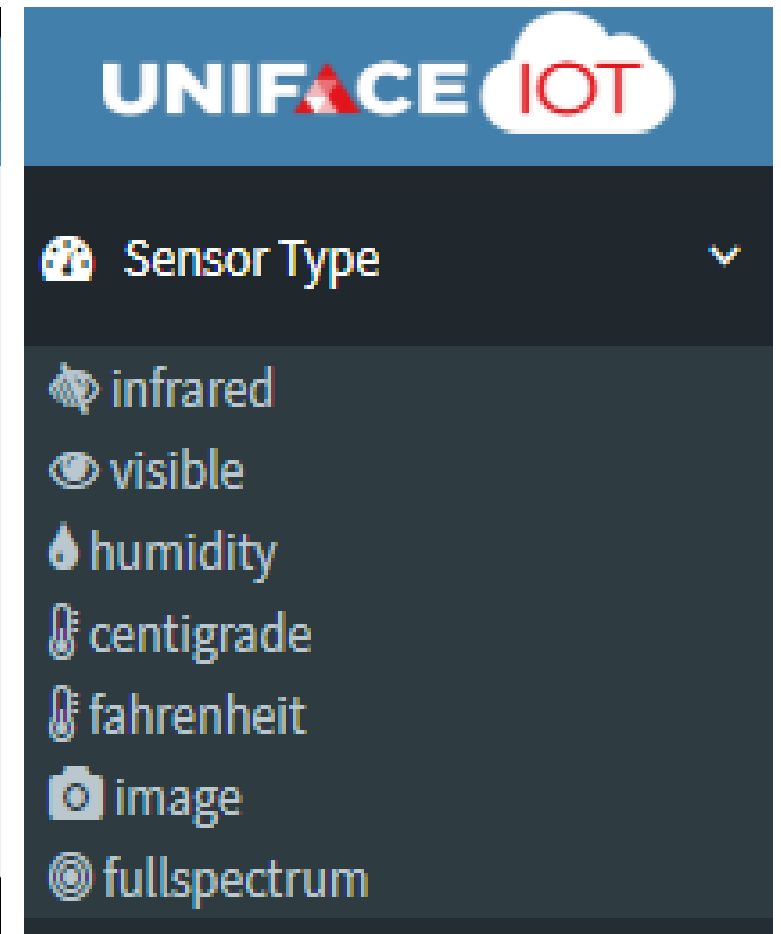
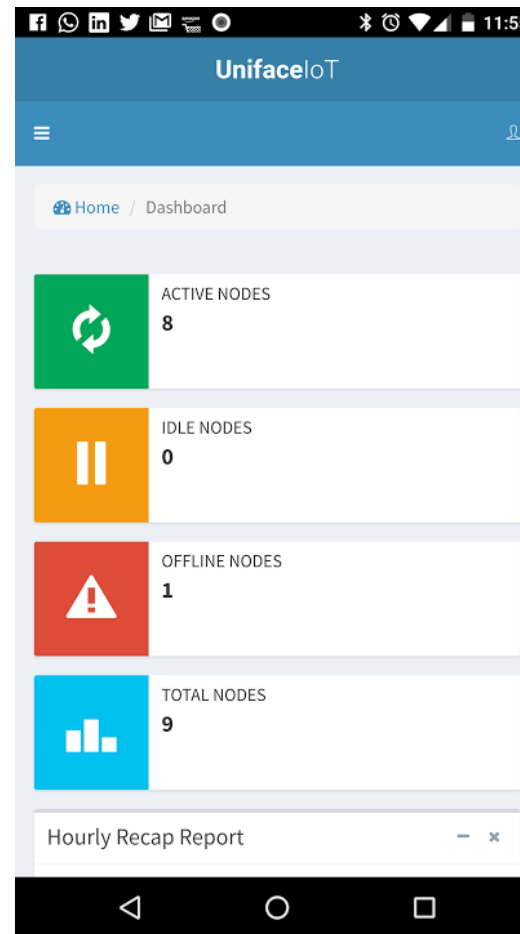
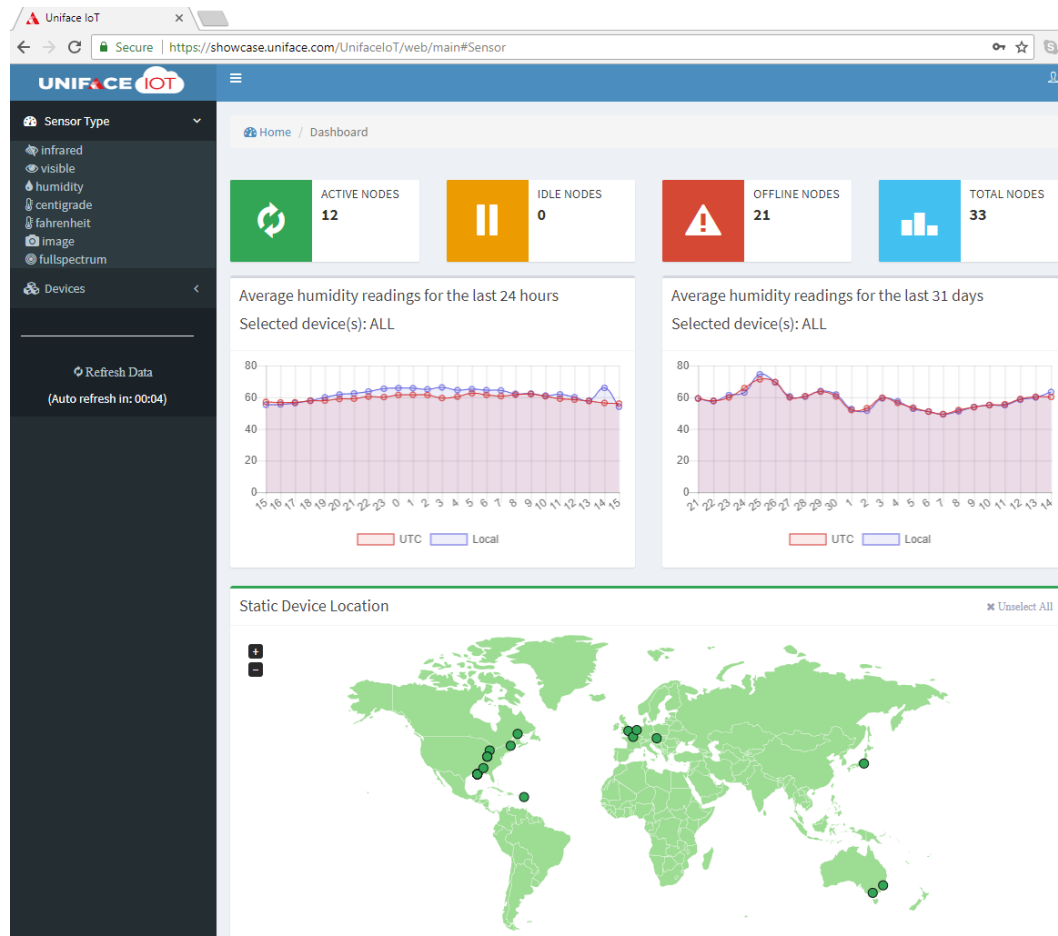
<https://youtu.be/tDFjowsQg5A>

Uniface API

uniface

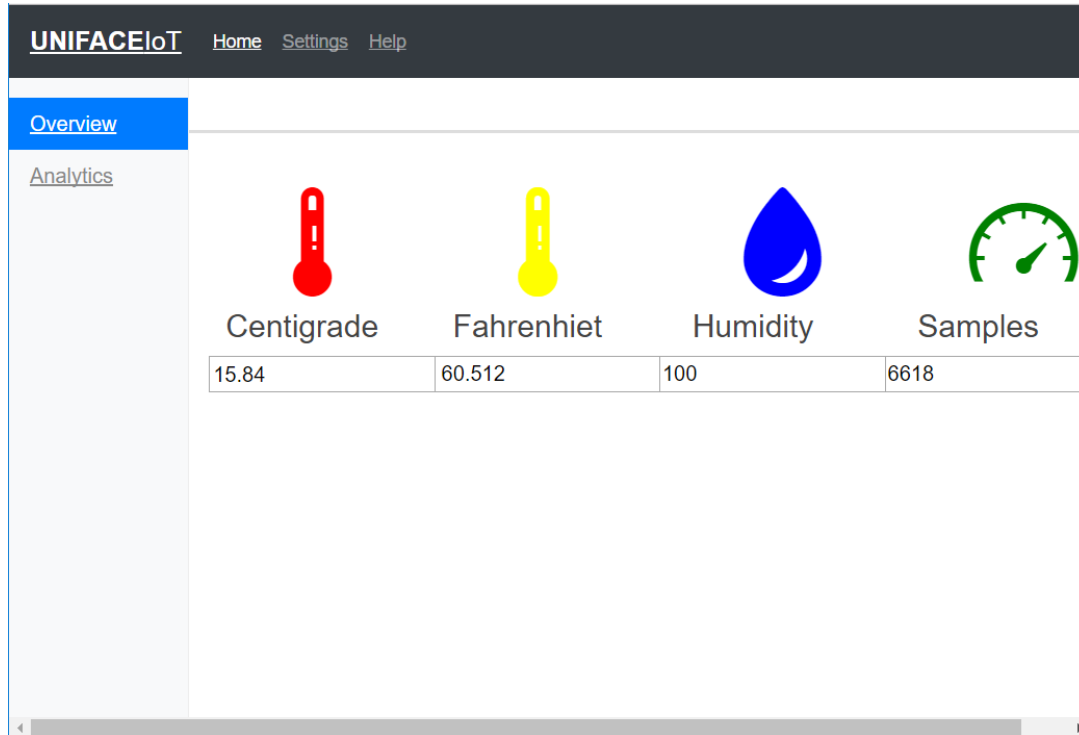
```
.getInstance()  
.getEntity("ENT_1.MODEL")  
.getOccurrence(1)  
.getField("FIELD_1");|
```

Web and mobile dashboards



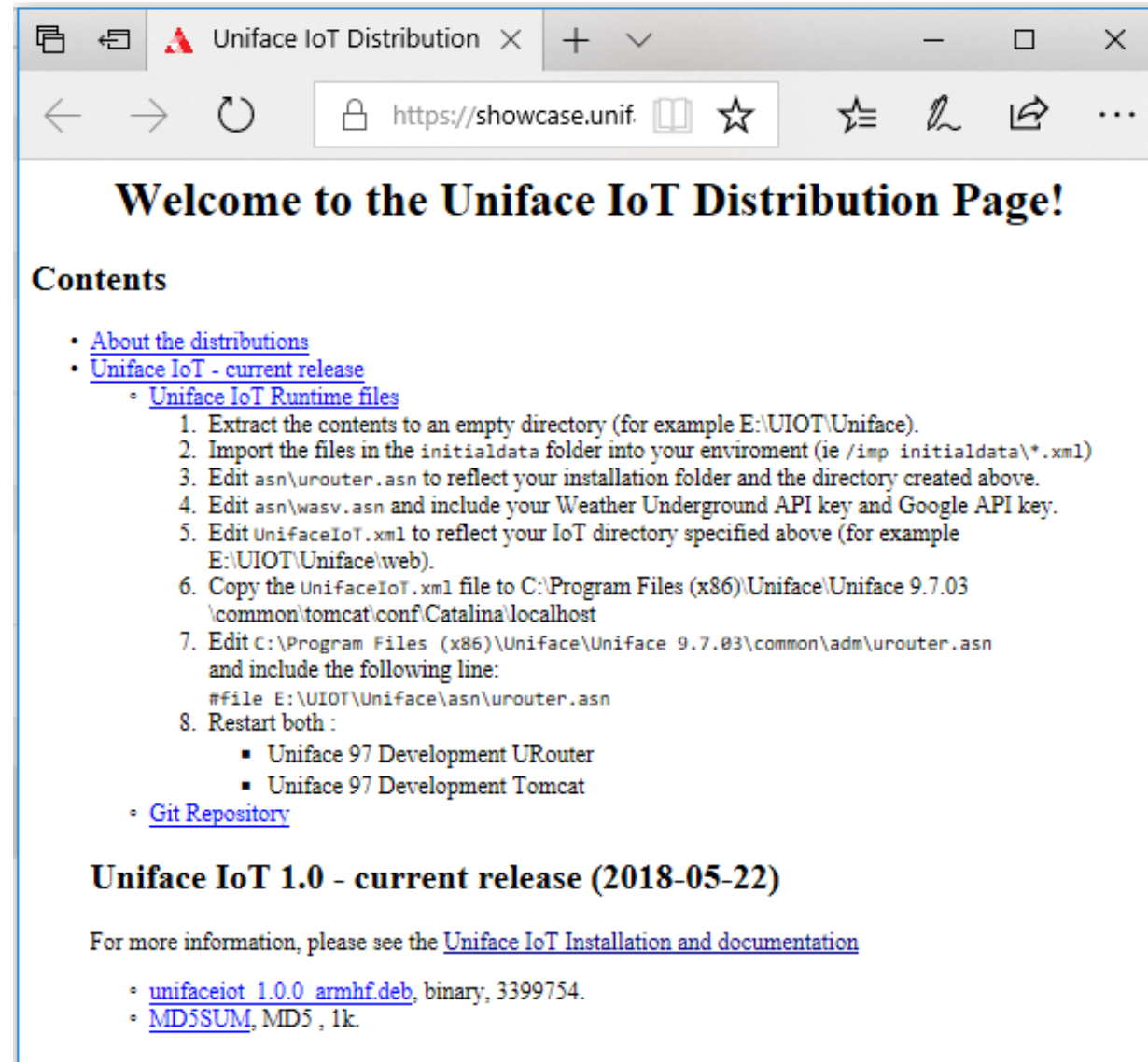
<https://showcase.uniface.com/UnifaceloT/web/main>

Uniface API on IoT Device



```
function getDevData (pDevName)
{
    var vDevData;
    var myInstance = uniface.getInstance("IOTDATA");
    myInstance.activate("getDeviceData", pDevName, vDevData)
    .then(
        function(p) {
            var response = JSON.parse(p.args[1]);
            document.getElementById("p1").value = response.maxrea
            document.getElementById("p2").value = response.maxrea
            document.getElementById("p3").value = response.maxrea
            document.getElementById("p4").value = response.conne
        }
    ).catch(function(e) { alert(e); });
    return true;
}
```

Join in



Uniface IoT Distribution

https://showcase.unif.

Welcome to the Uniface IoT Distribution Page!

Contents

- [About the distributions](#)
- [Uniface IoT - current release](#)
- [Uniface IoT Runtime files](#)
 1. Extract the contents to an empty directory (for example E:\UIOT\Uniface).
 2. Import the files in the initialdata folder into your environment (ie /imp initialdata*.xml)
 3. Edit asn\urouter.asn to reflect your installation folder and the directory created above.
 4. Edit asn\wasv.asn and include your Weather Underground API key and Google API key.
 5. Edit UnifaceIoT.xml to reflect your IoT directory specified above (for example E:\UIOT\Uniface\web).
 6. Copy the UnifaceIoT.xml file to C:\Program Files (x86)\Uniface\Uniface 9.7.03\common\tomcat\conf\Catalina\localhost
 7. Edit C:\Program Files (x86)\Uniface\Uniface 9.7.03\common\adm\urouter.asn and include the following line:
#file E:\UIOT\Uniface\asn\urouter.asn
 8. Restart both :
 - Uniface 97 Development URouter
 - Uniface 97 Development Tomcat
- [Git Repository](#)

Uniface IoT 1.0 - current release (2018-05-22)

For more information, please see the [Uniface IoT Installation and documentation](#)

- [unifaceiot 1.0.0 armhf.deb](#), binary, 3399754.
- [MD5SUM](#), MD5 , 1k.

<https://showcase.uniface.com/UnifaceIoT/distrib>





Thank You & Questions



UNIFACE

UNIFACE



in



uniface.com