

# Packaging a WURFL-based Solution

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**pluralsight**   
hardcore dev and IT training

# Key Points

**Licensing** terms

Packaging solutions

**WURFL** Cloud

# What's WURFL?

- **Wireless Universal Resource File**
  - DDR that maps HTTP request headers to a known profile of the client that issued the request: desktop, smartphone, tablet, et cetera
- **Multi-language API**
  - Java, ASP.NET, C++, PHP, Ruby, Perl, Node.js
  - On-premise and cloud
- **API Layout**
  - Initialize the DDR
  - Pass a user agent string
  - Receive a device description with 500+ capabilities

# The WURFL Ecosystem

## WURFL On-Site

- Integrate WURFL DDR right in your app/server

## WURFL Cloud

- Always-updated, highly-available cloud service for the WURFL DDR

## WURFL InFuze

- NGINX, Apache, Varnish modules to expose device capabilities to host servers

## WURFL InSight

- Up-to-date tables about devices capabilities for mobile analytics

# Building a WURFL-based Solution



## On-premise

- **Core API** installed within your web solution
- **InFuze** module attached to your web host environment
- **InSight** data for offline analytics



## Cloud

- Cloud API used from within your web solution

# The WURFL Database

Structure and location of the device repository.



**<http://wurfl.sourceforge.net>**

- Free for open-source and testing
- Partially-free for cloud (few capabilities)

**Not allowed to edit/copy**

- Can't access it using other than one of the WURFL official APIs

**XML file** (2MB zipped)

- Over **20K** devices
- Over **500** capabilities per device

# WURFL: Packaging/Maintenance

## Public repository

- Available to everybody
- Usable in open-source projects
- Updated every few months

## Customer vault

- Access to weekly builds of the DDR
- New devices added as they hit the market
- API updated quarterly to keep matching logic up-to-date

# General DDR Licensing Terms

Expert help is  
**NOT** free

**Can't** be free

Someone has to  
**research** and  
**maintain** a DDR

It's a **direct cost**  
for DDR  
companies

If it's free, it  
may be  
**discontinued**  
at any time

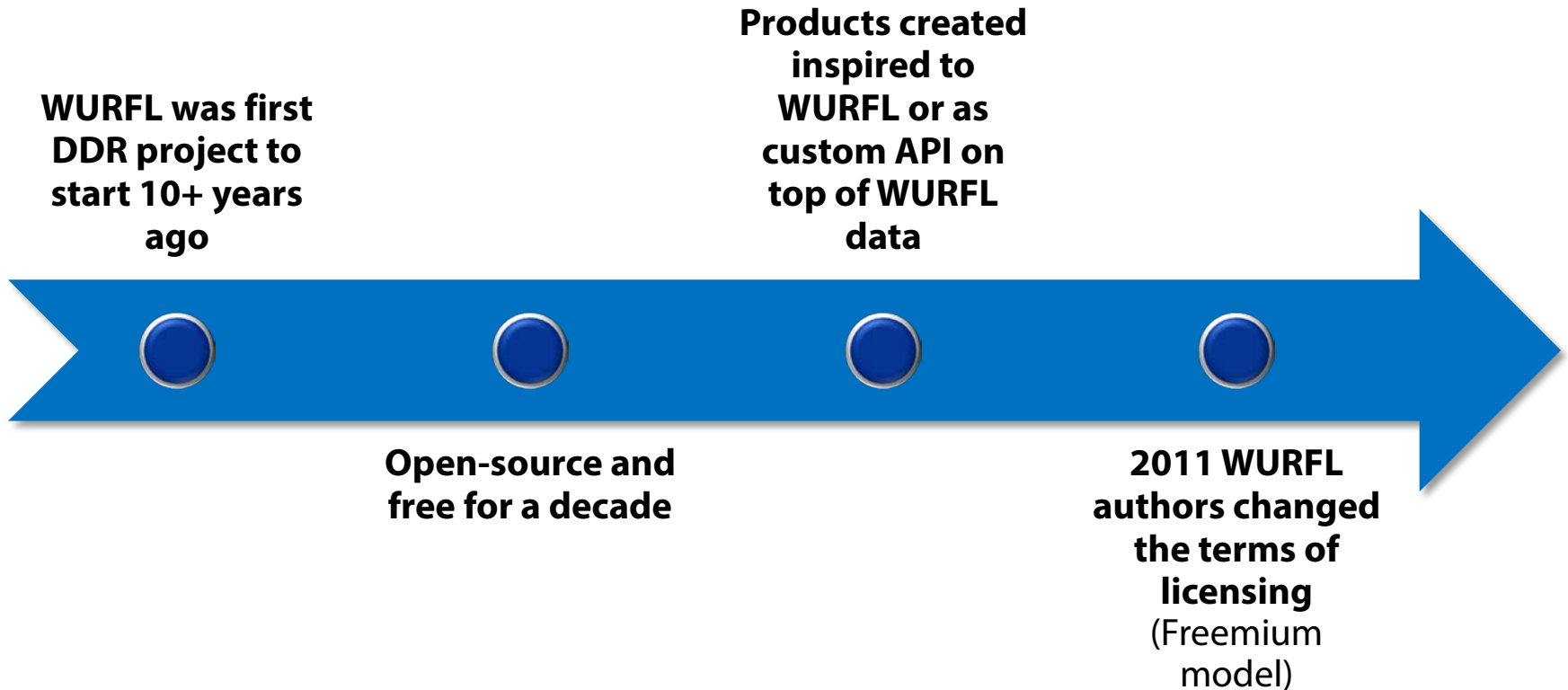
See **mdbf**  
Codeplex  
project

Successor to  
ASP.NET  
**.browser** files

Microsoft's very  
own DDR; just  
discontinued in  
2011



# True Story of DDRs



**PS:** Open-source doesn't mean FREE

# WURFL: Licensing Terms

Affero GPL v3 license

**Like GPL** except that if you run the program on a (web) server, your (web) server **too** must be open-source.

- **Quite strict licensing terms**
  - Applied only when you go in production; no license required for developing/testing
- **To use WURFL *without* buying a commercial license, you must:**
  - Make your full source code available as open-source
  - Regardless of the fact that the code is hosted on your own web server
  - See <http://wurfl.sourceforge.net>

# WURFL: Licensing Terms

- **WURFL on-premise**
  - Affero GPL v3 license
- **Other options exist!**
  - WURFL Cloud (free plan available)
  - WURFL.js (just free)

# WURFL Cloud API

<http://www.scientiamobile.com/cloud>

## Free plan (with restrictions)

- 1 IP address
- 2 capabilities of your choice (can be modified at any time)
- **5,000** detections per month

## Commercial plan(s)

- Flat monthly rate
- Based on detections/capabilities/I P addresses

# WURFL Cloud API

- **Get device information from the cloud manager object**
  - Returned object contains a dictionary named *Capabilities*
  - Filled with all the values for the requested capabilities.
  - Details at <http://www.scientiamobile.com/wurflCloud/gettingStarted>

```
var config = new DefaultCloudClientConfig
{
    ApiKey = "xxxxxx:yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy"
};

var manager = new CloudClientManager(config);
var info = manager.GetDeviceInfo(
    httpContext,
    new[] { "is_smartphone", "is_tablet" });
```

# Summary

- **Using DDR Frameworks**
  - Packaging DDR and stay in sync with updates
- **WURFL is free for open-source projects**
  - Data repository freely available
  - Updated a few times a year with new device profiles and UAs
  - WURFL has a cloud offering partially free
- **WURFL commercial**
  - Cloud or on-premise
  - Weekly drops of the DDR
- **Forum**
  - <http://www.scientiamobile.com/forum>

# Architecting Device-driven Web Solutions

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**Critical for  
business provide  
optimal  
experience on any  
devices**

It's no longer  
the time of  
MOBILE vs  
DESKTOP

**Misconceptions**

A tablet is not a  
smartphone

Mobile users  
expect slow  
responses

Create a single  
site that ignores  
the device

**RWD has little to  
do with devices**

**ASP.NET MVC  
works very well  
with DDRs**

One codebase;  
multiple HTML  
views