



UAProf

An overview



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Contents

Background

```
<?xml version="1.0"?>
<RDF xmlns="http://www.w3...
      <rdf:Description ID="Profile">
        . . .
      </rdf:Description>
    </RDF>
```

Architecture

RDF





Binary Encoding

Use Cases

Privacy



Background - Requirements

-  **Optimize performance**
-  **Maximize the user experience**
-  **Provide high-quality content**
-  **Provide leverage to developers**

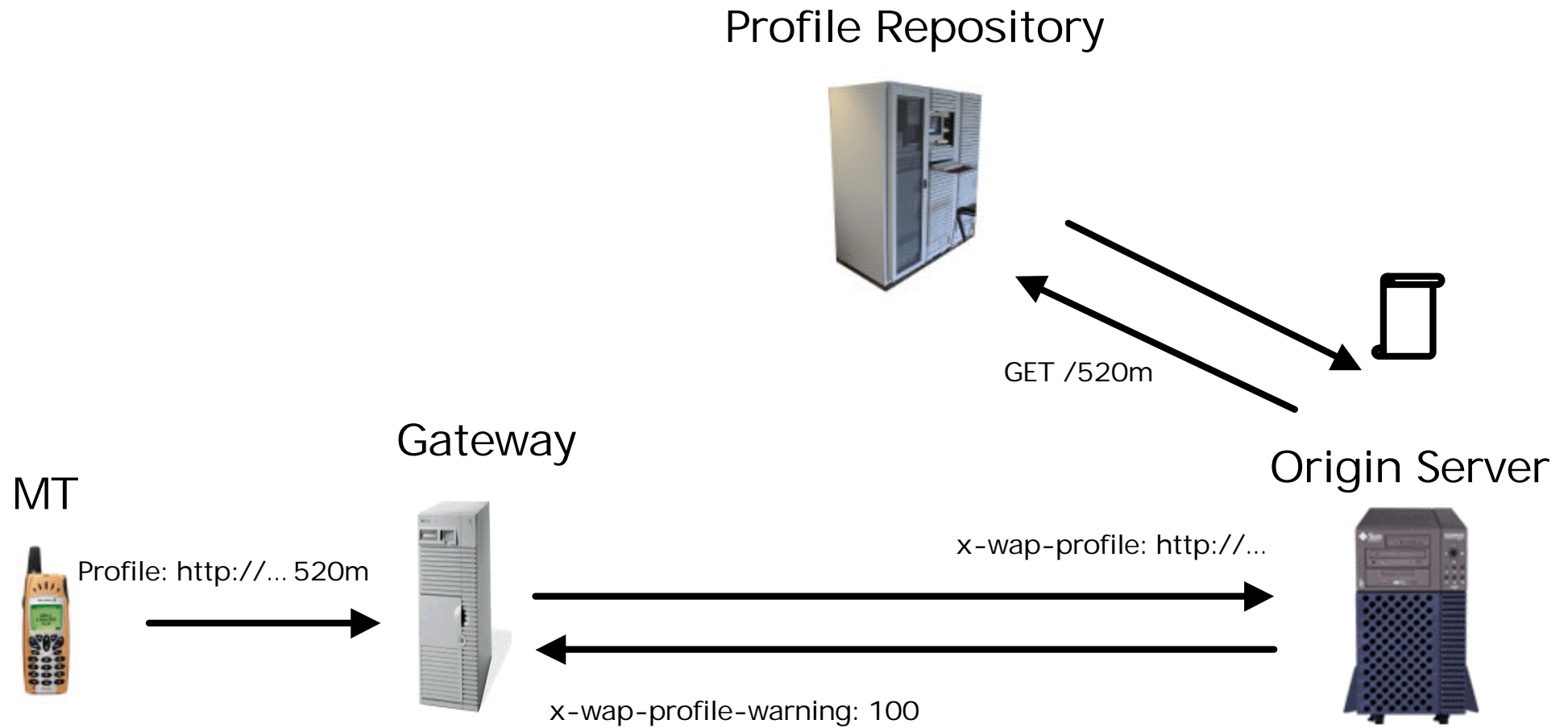
Background

- ✍ Existing solutions were thought insufficient
 - They required extra roundtrips
 - Insufficient properties
 - Too inflexible

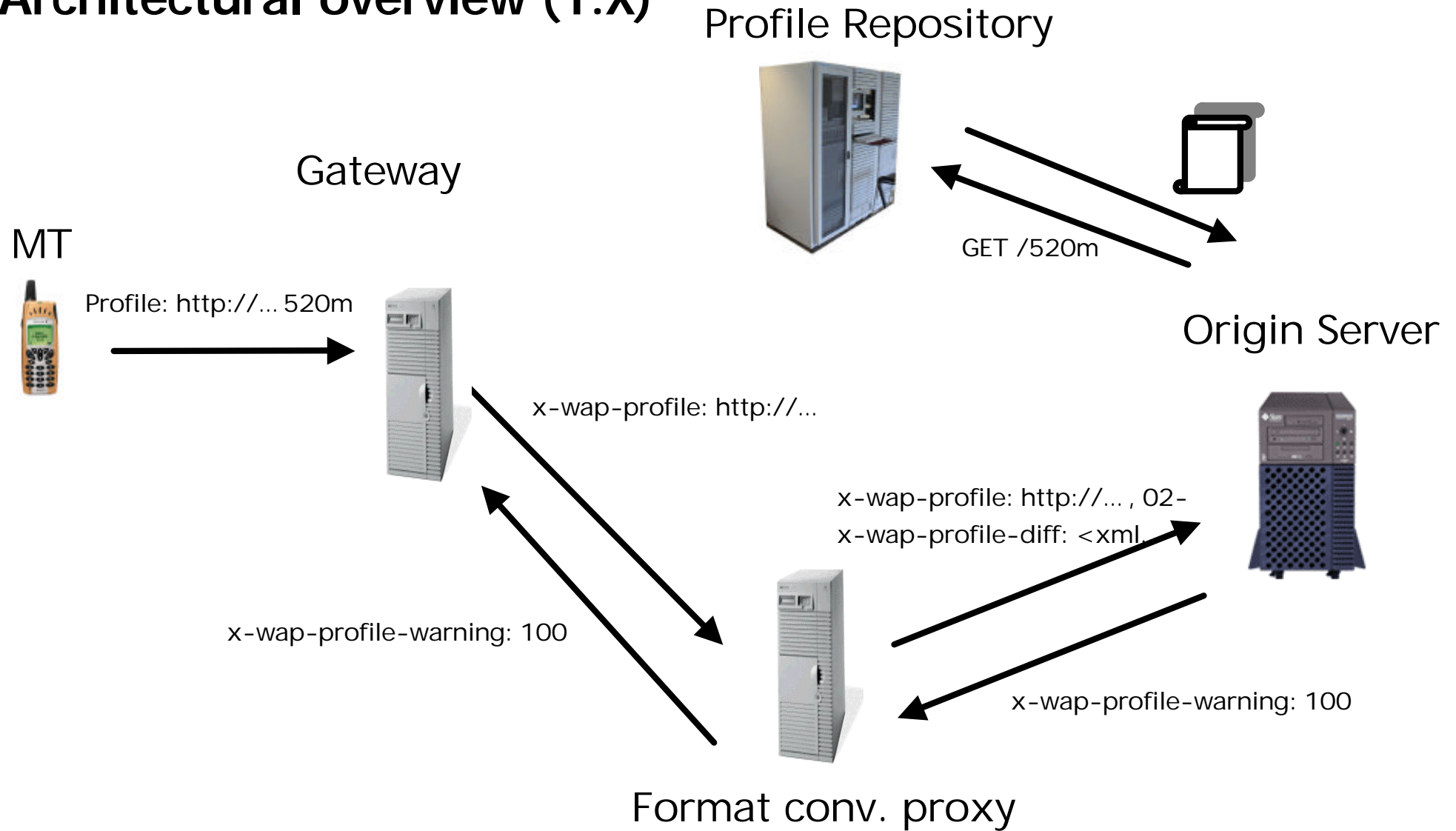
- ✍ A note called "CC/PP" had been submitted to the W3C...
 - Describing the use of RDF for describing user agents

- ✍ In WAP 2.0, the WGP is not mandatory
 - An optional "Feature and Performance enhancing" proxy has been introduced

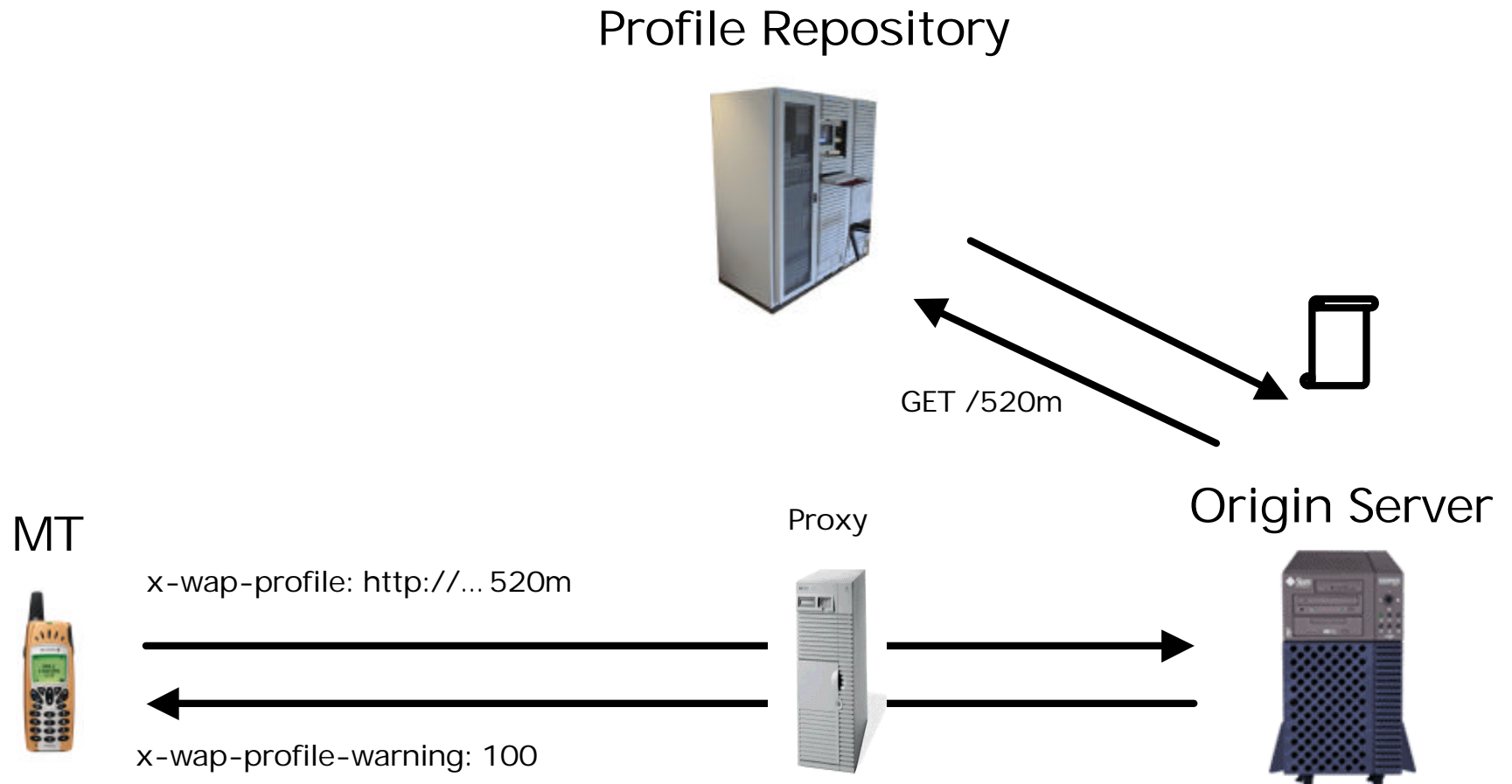
Architectural overview (1.X)



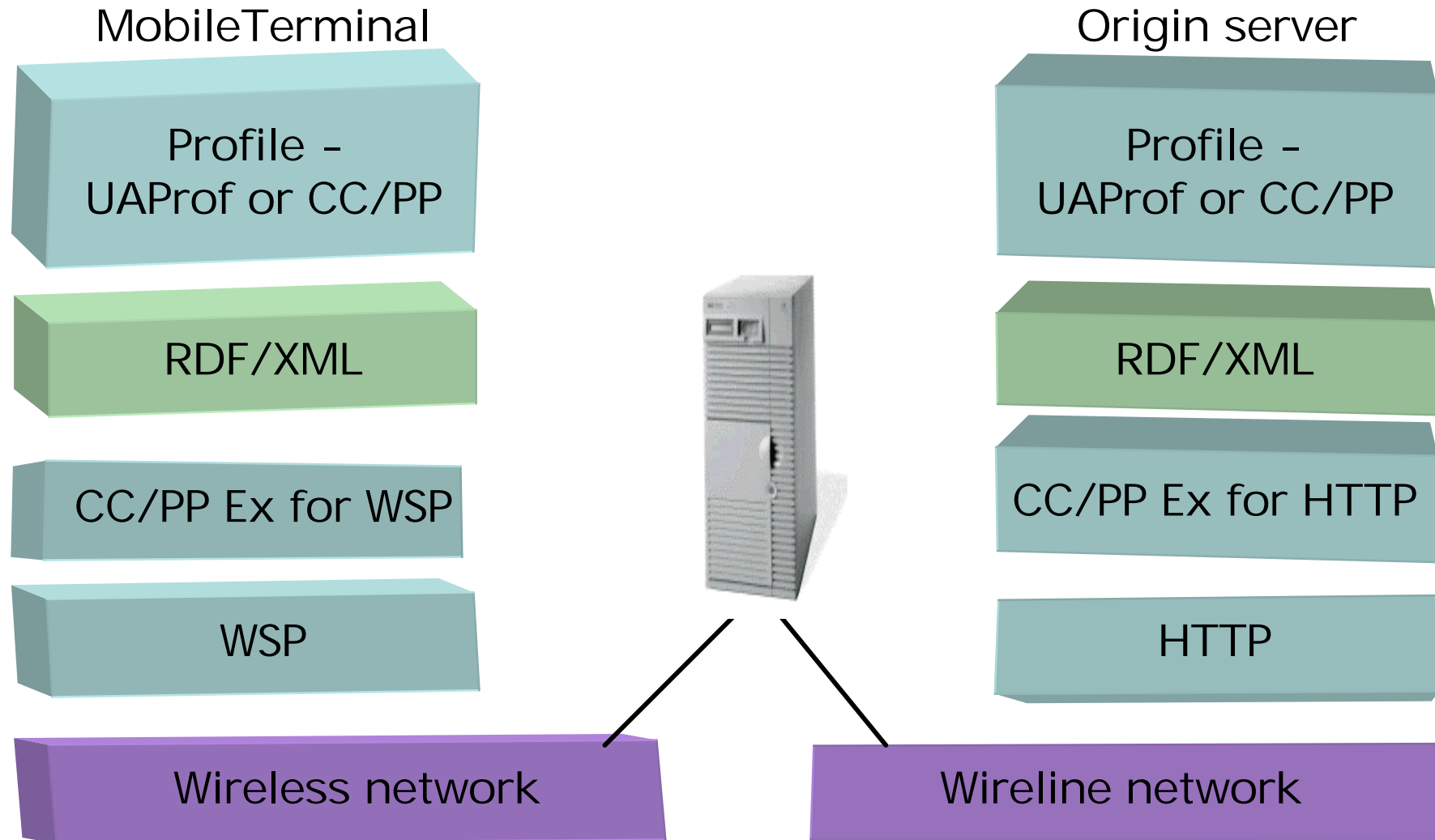
Architectural overview (1.X)



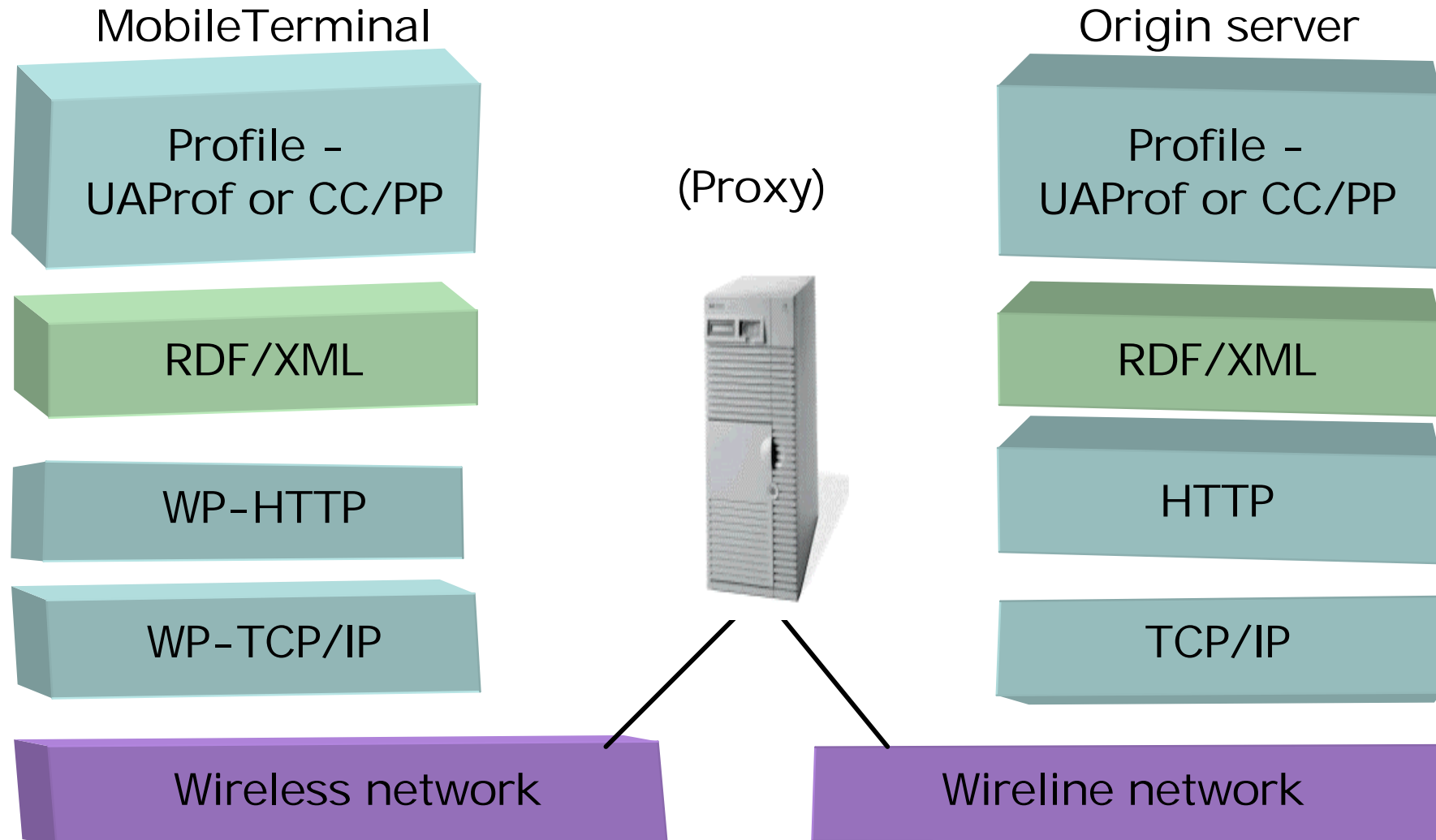
Architectural Overview (2.0)



Architecture 1.X



Architecture WAP 2.0



Architecture - The UAProf Protocol

 A standardized way to transmit Profiles over HTTP using the:

Request headers

- x-wap-profile:
- x-wap-profile-diff:

Response header

- x-wap-profile-warning:

 Headers can be used interchangeably in requests/responses by PPGs

RDF –The Ericsson R320s Example

```
<?xml version="1.0"?>  
<RDF xmlns=http://www.w3.org/1999/02/22-rdf-syntax-ns#  
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"  
  xmlns:ccpp="http://www.w3.org/2000/07/04-ccpp#"  
  xmlns:uaprof="http://www.wapforum.org/UAPROF/ccppschemata-20000405#">
```

```
<rdf:Description ID="Profile">  
  <ccpp:component>  
    <rdf:Description ID="HardwarePlatform">  
      <uaprof:Model>R320S</uaprof:Model>  
      <uaprof:InputCharSet>  
        <rdf:Bag>  
          <rdf:li>ISO-8859-1</rdf:li>  
          <rdf:li>US-ASCII</rdf:li>  
        </rdf:Bag>  
      </uaprof:InputCharSet>  
      <uaprof:VoicelInputCapable>Yes</uaprof:VoicelInputCapable>  
      <uaprof:ColorCapable>No</uaprof:ColorCapable>  
      <uaprof:PointingResolution>Pixel</uaprof:PointingResolution>  
      <uaprof:TextInputCapable>Yes</uaprof:TextInputCapable>  
      <uaprof:ImageCapable>Yes</uaprof:ImageCapable>  
      <uaprof:Vendor>Ericsson Mobile Communications AB</uaprof:Vendor>  
    </rdf:Description>  
  </ccpp:component>  
</rdf:Description>
```

```
</RDF>
```

Architecture - RDF

- ✍ RDF is defined by the RDF DTD
- ✍ RDF presumes the existence of a "Schema"
- ✍ A schema is a set of "components", that each contain a set of attributes
- ✍ An attribute **MUST** belong to one and only one component
- ✍ The realization of the schema constitute the "Profile"

Architecture - The Schema

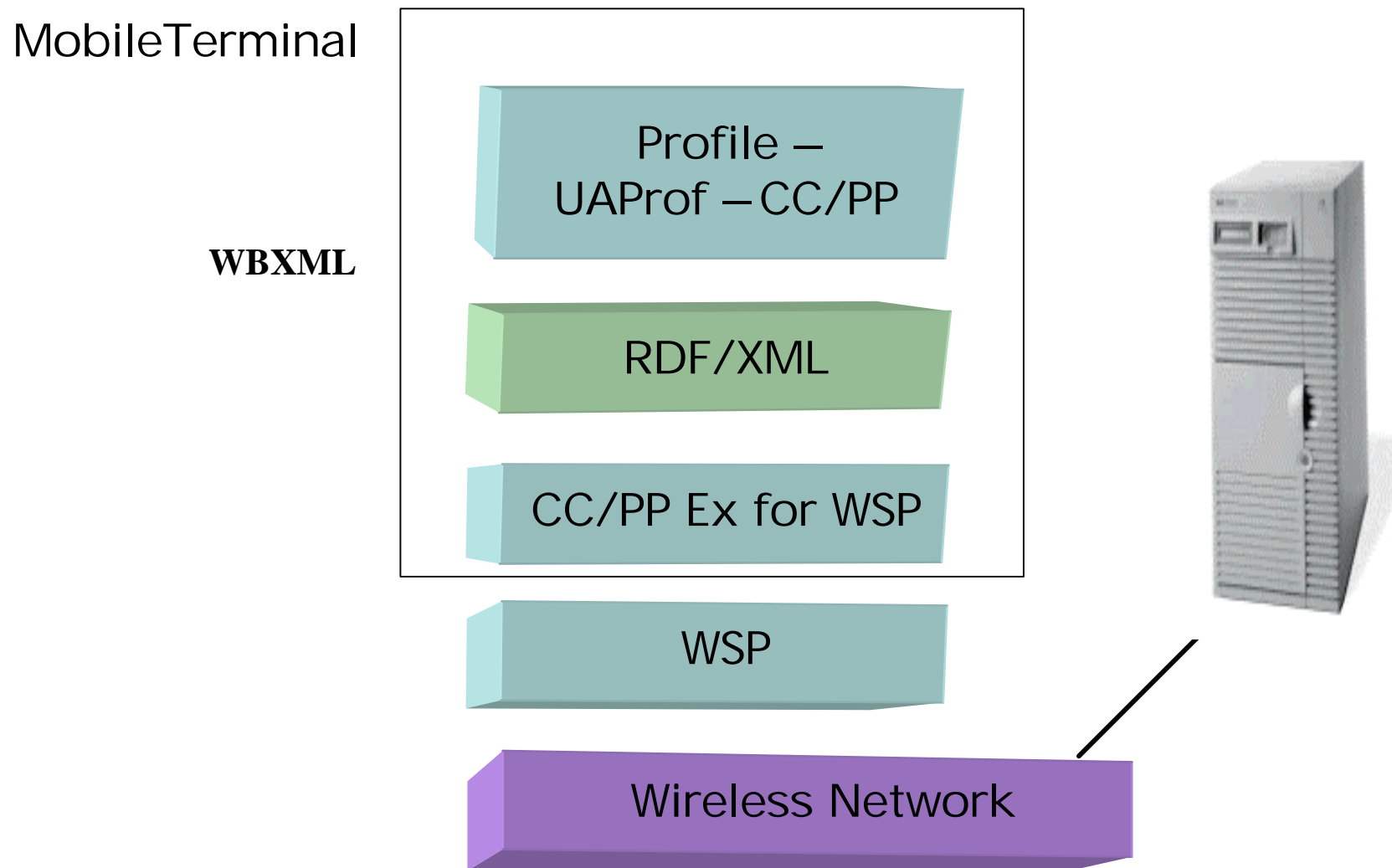
 The schema contains the following components

- HardwarePlatform
- SoftwarePlatform
- BrowserUA
- NetworkCharacteristics
- WapCharacteristics
- PushCharacteristics

 Properties can be shared between components using the “Defaults” description block

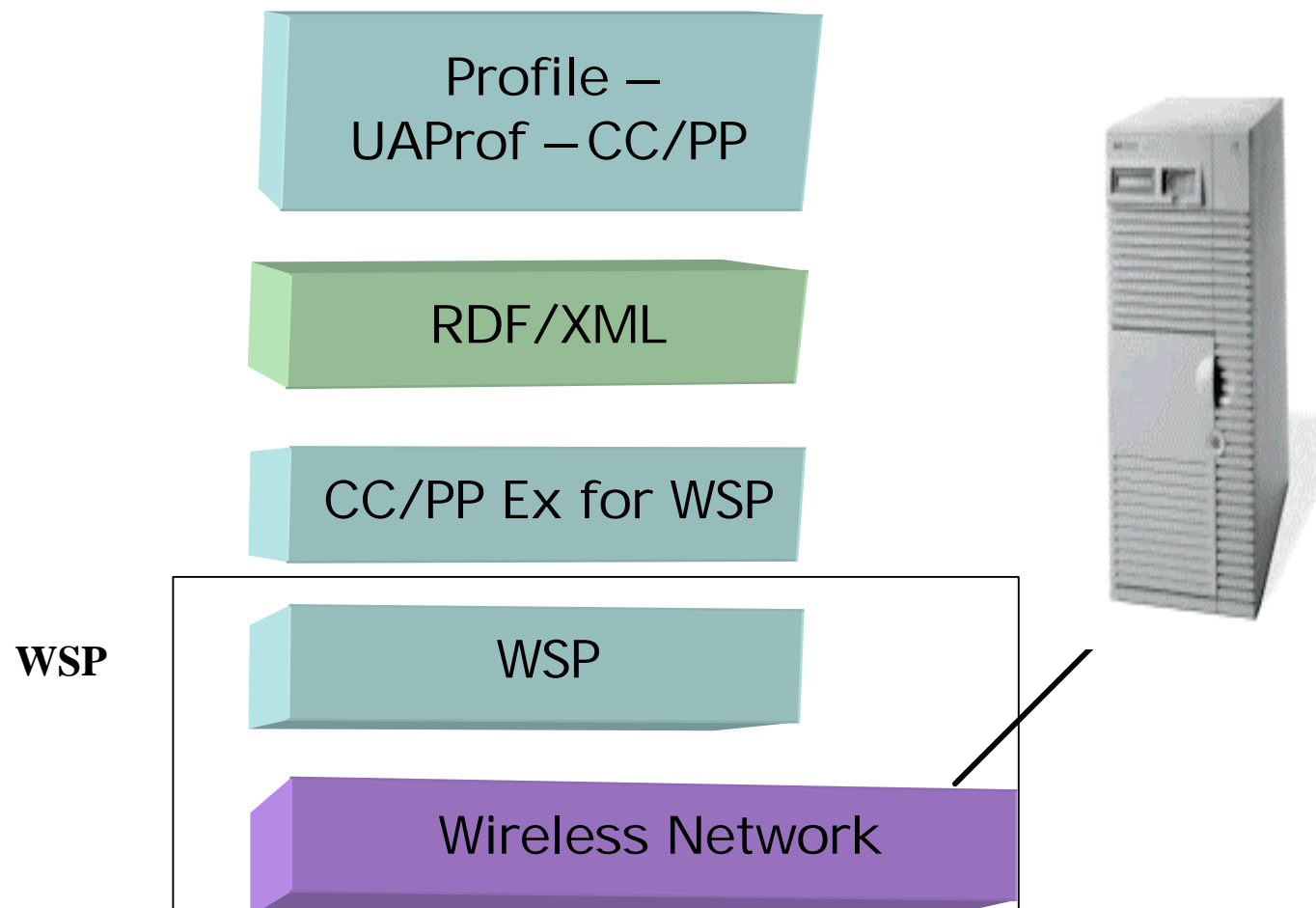
 URI's can be used to reference properties that are available in other “physical” documents outside the current profile

Binary Encoding - From the MS to the Gateway (1.X)

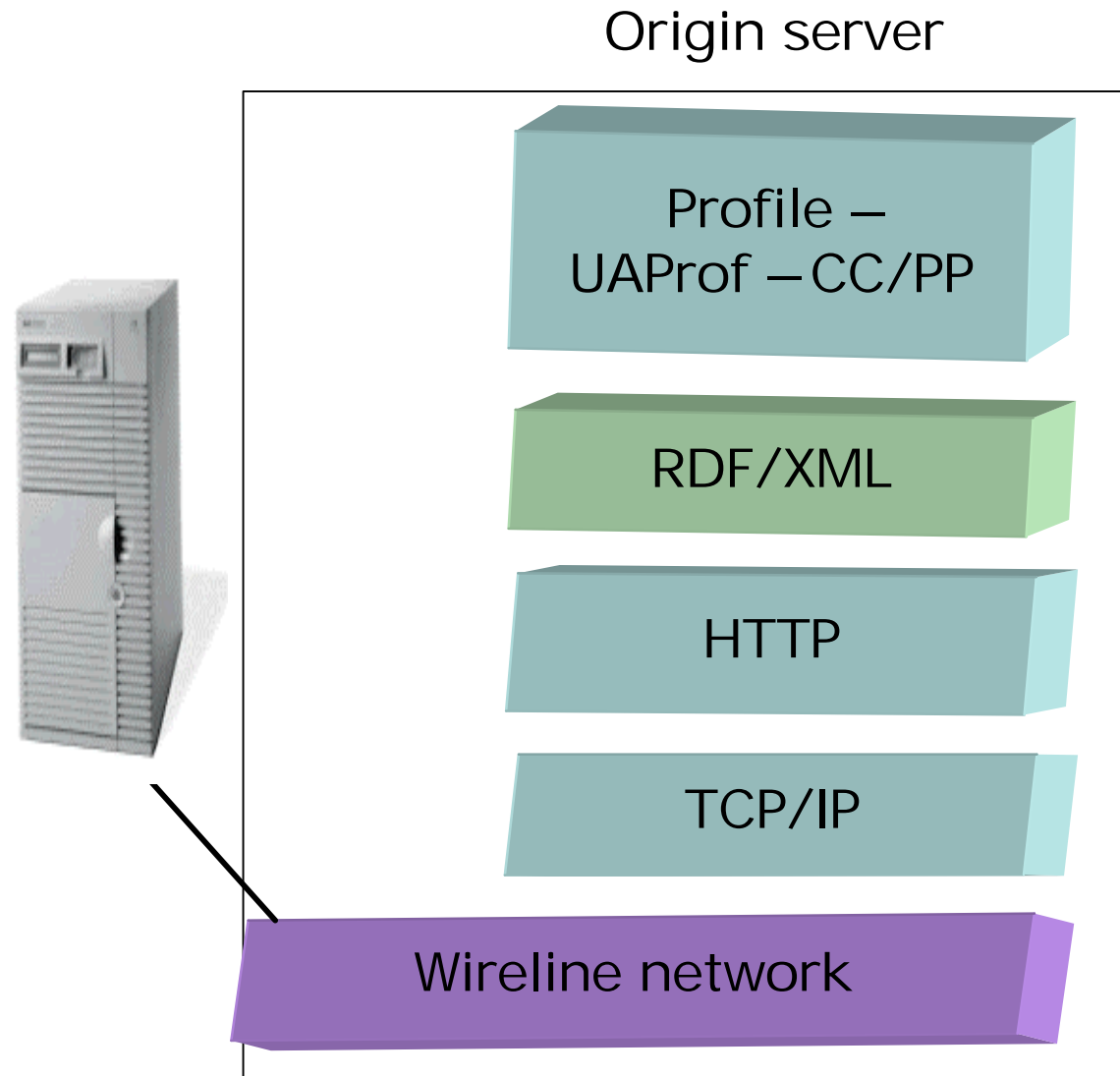


Binary Encoding - From the MS to the Gateway (1.X)

MobileTerminal



Binary Encoding - Plain Text on the Wireline side



Use Cases

- ✎ Opening a WSP session and establishing an initial Profile
 - WSP Connect

MT



Profile: http://... 520m

Profile-Diff: <?xml... .

Gateway



- ✎ Updating the UAProf during an active WSP session
 - Done using WSP Resume

- ✎ Resuming/Suspending a WSP session

Use Cases

Issuing a request for content:

1. Using cached Profile Information

 The regular "GET" request

2. Overriding the Profile Information within a request


 Overrides the cached information for that request

3. Profile Information provided by the WAP GW



Use Cases

-  **Resolving attribute values in the Profile**
 - How the server should construct the profile

-  **Third party requests for cached profile information**
 - Push Access Protocol (PAP)

