Abreviações

API	Application Program Interface
CC/PP	Composite Capability/Preferences Profile
CC/PPex	CC/PP Exchange Protocol
CONNEG	Content Negotiation Working Group in the IETF
ER	Entity-Relationship
HTML	HypertText Markup Language
HTTP	HyperText Transfer Protocol
HTTPex	HTTP Extension Framework
IANA	Internet Assigned Numbers Authority
ICAP	Internet Content Adaptation Protocol
IETF	Internet Engineering Task Force
RDF	Resource Description Framework
RFC	Request for Comments
SOAP	Simple Object Access Protocol
TCP/IP	Transmission Control Protocol/Internet Protocol
UAProf	WAP User Agent Profile
WSDL	Web Service Description Language
W3C	World Wide Web Consortium
XML	Extensible Markup Language
URI	Uniform Resource Identifier

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Apêndice A
Arquitetura CC/PP

O objetivo deste apêndice não é descrever características específicas mas sim, indicar princípios gerais que dão fundamento ao projeto do CC/PP. Por essa razão, esta não é um apêndice normativa apesar de conter informações que precisam ser bem entendidas para permitir que o CC/PP seja implementado de forma correta.

O perfil CC/PP está estruturado em dois níveis de hierarquia:

- um perfil com um conjunto de *componentes*, e

- cada componente com um conjunto de *atributos*.

A1
Componentes

O perfil CC/PP pode ser representado graficamente como uma árvore cujas ramificações principais constituem componentes. Alguns exemplos de componentes são:

- plataforma de "hardware",

- plataforma de "software", ou

- uma aplicação individual como, por exemplo, um "browser".

Abaixo, está a representação da árvore CC/PP com os três componentes descritos acima.

```
[Profile]

|

+--ccpp:component-->[TerminalHardware]
+--ccpp:component-->[TerminalSoftware]
+--ccpp:component-->[TerminalBrowser]
```
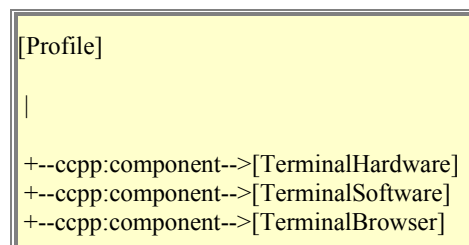
Figura A.1: Componentes de um perfil CC/PP

A especificação XML correspondente está ilustrada na figura abaixo:

```
<?xml version="1.0"?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
         xmlns:ccpp="http://www.w3.org/2002/11/08-ccpp-schema#"
         xmlns:example="http://www.example.com/schema#">

  <rdf:Description
rdf:about="http://www.example.com/profile#MyProfile">

    <ccpp:component>
      <rdf:Description

rdf:about="http://www.example.com/profile#TerminalHardware">
        <!--  Declaração das propriedades do TerminalHardware  -->
      </rdf:Description>
    </ccpp:component>

    <ccpp:component>
      <rdf:Description

rdf:about="http://www.example.com/profile#TerminalSoftware">
        <!--  Declaração das propriedades do TerminalSoftware  -->
      </rdf:Description>
    </ccpp:component>

    <ccpp:component>
      <rdf:Description

rdf:about="http://www.example.com/profile#TerminalBrowser">
        <!--  Declaração das propriedades do TerminalBrowser  -->
      </rdf:Description>
    </ccpp:component>

  </rdf:Description>
</rdf:RDF>
```

Figura A.2: Componentes de um perfil CC/PP descritos em XML

A2
Atributos

O perfil CC/PP descreve as características dos dispositivos cliente e suas preferências através de um conjunto de atributos CC/PP, por componente.

A descrição de cada componente representa uma sub-árvore cujas ramificações são as características e preferências associadas a cada um deles. Na imensa maioria dos casos, o que se observa é que as capacidades são descritas através de um conjunto pequeno de atributos CC/PP associado com um valor atômico, simples. Entretanto, como o CC/PP baseia-se no modelo RDF, é possível modelar estruturas de dados mais amplas e complexas através de subgrafos RDF. Um caso bem típico que requer a descrição de uma estrutura de dados mais complexa é quando se deseja representar alternativas de valores como, por exemplo, um browser que suporte diferentes versões de HTML. A figura abaixo mostra um perfil hipotético incluindo o exemplo citado.

```
     [ex:MyProfile]
        |
     +--ccpp:component-->[ex:TerminalHardware]
     |                        |
     |                        +--rdf:type---->
[ex:HardwarePlatform]
     |                        +--ex:displayWidth--> "320"
     |                        +--ex:displayHeight--> "200"
     |
     +--ccpp:component-->[ex:TerminalSoftware]
     |                        |
     |                        +--rdf:type---->
[ex:SoftwarePlatform]
     |                        +--ex:name-----> "EPOC"
     |                        +--ex:version--> "2.0"
     |                        +--ex:vendor---> "Symbian"
     |
     +--ccpp:component-->[ex:TerminalBrowser]
                              |
                              +--rdf:type---->
[ex:BrowserUA]

                              +--ex:name-----> "Mozilla"
                              +--ex:version--> "5.0"
                              +--ex:vendor---> "Symbian"
                              +--ex:htmlVersionsSupported-->
[ ]

     |
                                      ------------------------
--
                                  |
                                  +--rdf:type---> [rdf:Bag]
                                  +--rdf:_1-----> "3.0"
                                  +--rdf:_2-----> "4.0"
```

Figura A.3 - Exemplo de um perfil CC/PP com alternativa de valores

A figura abaixo contém a especificação XML correspondente.

```
<?xml version="1.0"?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-
ns#"
        xmlns:ccpp="http://www.w3.org/2002/11/08-ccpp-
schema#"
        xmlns:ex="http://www.example.com/schema#">

  <rdf:Description
      rdf:about="http://www.example.com/profile#MyProfile">

    <ccpp:component>
      <rdf:Description

rdf:about="http://www.example.com/profile#TerminalHardware">
        <rdf:type

rdf:resource="http://www.example.com/schema#HardwarePlatform"
/>
        <ex:displayWidth>320</ex:displayWidth>
        <ex:displayHeight>200</ex:displayHeight>
      </rdf:Description>
```

```
        </ccpp:component>

    <ccpp:component>
      <rdf:Description

rdf:about="http://www.example.com/profile#TerminalSoftware">
        <rdf:type

rdf:resource="http://www.example.com/schema#SoftwarePlatform"
/>
        <ex:name>EPOC</ex:name>
        <ex:version>2.0</ex:version>
        <ex:vendor>Symbian</ex:vendor>
      </rdf:Description>
    </ccpp:component>

    <ccpp:component>
      <rdf:Description

rdf:about="http://www.example.com/profile#TerminalBrowser">
        <rdf:type

rdf:resource="http://www.example.com/schema#BrowserUA" />
        <ex:name>Mozilla</ex:name>
        <ex:version>5.0</ex:version>
        <ex:vendor>Symbian</ex:vendor>
        <ex:htmlVersionsSupported>
          <rdf:Bag>
            <rdf:li>3.0</rdf:li>
            <rdf:li>4.0</rdf:li>
          </rdf:Bag>
        </ex:htmlVersionsSupported>
      </rdf:Description>
    </ccpp:component>

  </rdf:Description>
</rdf:RDF>
```

Figura A.4 - Exemplo de um perfil CC/PP especificado em XML

A3
"Defaults"

Os atributos de um componente podem ser descritos implicitamente no perfil tal como apresentado anteriormente, ou podem ser especificados através de uma referência a um perfil "default", podendo estar descrito em um outro documento separado e acessado através da sua URI.

Um perfil CC/PP pode residir em um determinado servidor e também pode ser armazenado ("cached") separadamente em outro local, vindo a possibilitar otimizações muito importantes, principalmente em ambientes sem fio onde, de um modo geral, a conexão é cara e lenta. A especificação de perfis "default" diminui

o tamanho da informação que trafega na rede pois só uma pequena parte do perfil
do cliente tem que ser incorporada à mensagem de solicitação (Request).

```
[MyProfile]


 |
 +--ccpp:component--> [TerminalHardware]
 |                    |
 |                    +--rdf:type-------> [HardwarePlatform]
 |                    +--ccpp:defaults--> [HWDefault]
 |
 +--ccpp:component--> [TerminalSoftware]
 |                    |
 |                    +--rdf:type------> [SoftwarePlatform]
 |                    +--ccpp:defaults--> [SWDefault]
 |
 +--ccpp:component--> [TerminalBrowser]
                      |
                      +--rdf:type-------> [BrowserUA]
                      +--ccpp:defaults--> [UADefault]

[HWDefault]
 |
 +--rdf:type---> [HardwarePlatform]
 +--display----> "320x200"

[SWDefault]
 |
 +--rdf:type---> [SoftwarePlatform]
 +--name-------> "EPOC"
 +--version----> "2.0"
 +--vendor-----> "Symbian"

[UADefault]
 |
 +--rdf:type---> [BrowserUA]
 +--name-------> "Mozilla"
 +--version----> "5.0"
 +--vendor-----> "Symbian"
 +--htmlVersionsSupported--> [ ]
                             |
                             +--rdf:type---> [rdf:Bag]
                             +--rdf:_1-----> "3.0"
                             +--rdf:_2-----> "4.0"
```

Figura A.5 - Um perfil CC/PP usando "defaults"

Especificação XML correspondente:

```
            Perfil de um dispositivo com referências a "defaults":
<?xml version="1.0"?>
<!-- Checked by SiRPAC 1.16, 18-Jan-2001 -->
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
        xmlns:ccpp="http://www.w3.org/2000/07/04-ccpp#">

  <rdf:Description rdf:about="MyProfile">

    <ccpp:component>
      <rdf:Description rdf:about="TerminalHardware">
```

```
        <rdf:type rdf:resource="HardwarePlatform" />
        <ccpp:defaults rdf:resource="HWDefault" />
      </rdf:Description>
    </ccpp:component>

    <ccpp:component>
      <rdf:Description rdf:about="TerminalSoftware">
        <rdf:type rdf:resource="SoftwarePlatform" />
        <ccpp:defaults rdf:resource="SWDefault" />
      </rdf:Description>
    </ccpp:component>

    <ccpp:component>
      <rdf:Description rdf:about="TerminalBrowser">
        <rdf:type rdf:resource="BrowserUA" />
        <ccpp:defaults rdf:resource="UADefault" />
      </rdf:Description>
    </ccpp:component>

  </rdf:Description>
</rdf:RDF>
```

Defaults da Plataforma de Hardware:

```
<?xml version="1.0"?>
<!-- Checked by SiRPAC 1.16, 18-Jan-2001 -->
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
        xmlns:ccpp="http://www.w3.org/2000/07/04-ccpp#">
  <rdf:Description rdf:about="HWDefault">
    <rdf:type rdf:resource="HardwarePlatform" />
    <display>320x200</display>
  </rdf:Description>
</rdf:RDF>
```

Defaults da Plataforma de Software:

```
<?xml version="1.0"?>
<!-- Checked by SiRPAC 1.16, 18-Jan-2001 -->
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
        xmlns:ccpp="http://www.w3.org/2000/07/04-ccpp#">
  <rdf:Description rdf:about="SWDefault">
    <rdf:type rdf:resource="SoftwarePlatform" />
    <name>EPOC</name>
    <version>2.0</version>
    <vendor>Symbian</vendor>
  </rdf:Description>
</rdf:RDF>
```

Defaults do BrowserUA:

```
<?xml version="1.0"?>
<!-- Checked by SiRPAC 1.16, 18-Jan-2001 -->
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
        xmlns:ccpp="http://www.w3.org/2000/07/04-ccpp#">
  <rdf:Description rdf:about="UADefault">
    <rdf:type rdf:resource="BrowserUA" />
    <name>Mozilla</name>
    <version>5.0</version>
    <vendor>Symbian</vendor>
    <htmlVersionsSupported>
      <rdf:Bag>
        <rdf:li>3.0</rdf:li>
        <rdf:li>4.0</rdf:li>
      </rdf:Bag>
```

```
      </htmlVersionsSupported>
    </rdf:Description>
</rdf:RDF>
```

Figura A.6 - Um perfil CC/PP com "defaults" especificado em XML

Para sobreposição de dos valores definidos nos perfis "default", é necessário apenas fazer uma atribuição direta na parte principal da descrição do perfil já que a atribuição direta tem precedência sobre a atribuição feita no perfil "default".

No cenário abaixo o componente "default" que representa o hardware foi definido com 16Mb de memória. A propriedade memory, especificada no perfil do dispositivo, irá sobrepor o valor do atributo memória através de uma atribuição direta.

```
[MyProfile]

 |
 +--ccpp:component--> [TerminalHardware]
                             |
                             +--rdf:type-------> [HardwarePlatform]
                             +--ccpp:defaults--> [HWDefault]
                             +--memory---------> "32Mb"

[HWDefault]
 |
 +--rdf:type---> [HardwarePlatform]
 +--display----> "320x200"
 +--memory-----> "16Mb"

```

Figura A.7 - Sobreposição do valor "default" para o atributo "memory"

Especificação XML correspondente:

```
Perfil do dispositivo referenciando valores defaults:

<?xml version="1.0"?>
<!-- Checked by SiRPAC 1.16, 18-Jan-2001 -->
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-
ns#"
        xmlns:ccpp="http://www.w3.org/2000/07/04-ccpp#">

  <rdf:Description rdf:about="MyProfile">

    <ccpp:component>
      <rdf:Description rdf:about="TerminalHardware">
        <rdf:type rdf:resource="HardwarePlatform" />
        <ccpp:defaults rdf:resource="HWDefault" />
        <memory>32Mb</memory>
      </rdf:Description>
    </ccpp:component>

  </rdf:Description>
</rdf:RDF>
```

Defaults para Plataforma de Hardware:

```xml
<?xml version="1.0"?>
<!-- Checked by SiRPAC 1.16, 18-Jan-2001 -->
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-
ns#"
        xmlns:ccpp="http://www.w3.org/2000/07/04-ccpp#">
  <rdf:Description rdf:about="HWDefault">
    <rdf:type rdf:resource="HardwarePlatform" />
    <display>320x200</display>
    <memory>16Mb</memory>
  </rdf:Description>
</rdf:RDF>
```

Figura A.8: Sobreposição do valor "default" especificado em XML

A estrutura do perfil CC/PP é bastante similar a arquitetura descrita nas seções anteriores, composta por componentes e atributos. Maiores particularidades a respeito da estrutura CC/PP podem ser obtidas na especificação (CCPP, 2003).

Apêndice B
Esquemas do Vocabulário

Esquema do Dispositivo Cliente

```xml
<?xml version="1.0"?>
<!DOCTYPE rdf:RDF [
  <!ENTITY ns-rdf  'http://www.w3.org/1999/02/22-rdf-syntax-ns#'>
  <!ENTITY ns-rdfs 'http://www.w3.org/2000/01/rdf-schema#'>
  <!ENTITY ns-prf 'http://www.wapforum.org/UAPROF/ccppschema-
20010330#'>
  <!ENTITY ns-hcv 'file:///h:/HCM/schema/ClientProfileSchema-
20030408#'>
]>
<rdf:RDF xmlns:rdf="&ns-rdf;" xmlns:rdfs="&ns-rdfs;"
xmlns:prf="&ns-prf;" xmlns:hcv="&ns-hcv;">
     <rdf:Description rdf:ID="ProfileComponent">
           <rdf:type rdf:resource="&ns-rdfs;Class"/>
           <rdfs:subClassOf rdf:resource="&ns-rdfs;Resource"/>
           <rdfs:label>ProfileComponent</rdfs:label>
           <rdfs:comment>
     A Component within the CC/PP Schema is a class of related
properties
     that describe the client device capabilities. Author:
Propriedade do Laboratório        Telemídia, April 2003.
   </rdfs:comment>
     </rdf:Description>
     <!--
      Properties shared among the components
       -->
     <rdf:Description rdf:ID="component">
           <rdf:type rdf:resource="&ns-rdfs;Property"/>
           <rdfs:label>component</rdfs:label>
           <rdfs:comment>The component attribute links the
various components to the root node (profile).
           </rdfs:comment>
     </rdf:Description>
     <!--
     Main Client Profile Components
     -->
     <rdf:Description rdf:ID="HardwarePlatform">
           <rdf:type rdf:resource="&ns-rdfs;Class"/>
           <rdfs:subClassOf rdf:resource="#ProfileComponent"/>
           <rdfs:label>Component: HardwarePlatform</rdfs:label>
           <rdfs:comment>This type of object represents the
description that can be used to define the hardware capabilities
of a given device.
           </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="SoftwarePlatform">
           <rdf:type rdf:resource="&ns-rdfs;Class"/>
           <rdfs:subClassOf rdf:resource="#ProfileComponent"/>
           <rdfs:label>Component: SoftwarePlatform</rdfs:label>
```

```
            <rdfs:comment>This type of object represents the
description that can be used to define properties of the device
application environment, operating system, and installed software.
OS, etc.
            </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="BrowserPreferences">
            <rdf:type rdf:resource="&ns-rdfs;Class"/>
            <rdfs:subClassOf rdf:resource="#ProfileComponent"/>
            <rdfs:label>Component: BrowserPreferences</rdfs:label>
            <rdfs:comment>This type of object represents the
description that can be used to define players or tools used by
the client device to access to the network services.
        </rdfs:comment>
      <rdf:Description rdf:ID="HyperPropPreferences">
            <rdf:type rdf:resource="&ns-rdfs;Class"/>
            <rdfs:subClassOf rdf:resource="#ProfileComponent"/>
            <rdfs:label>Component:
HyperPropPreferences</rdfs:label>
            <rdfs:comment>This type of object represents the
description that can be used by HyperProp (a hypermedia system).
        </rdfs:comment>
      </rdf:Description>
            <rdf:Description
rdf:ID="CurrentProfileIdentification">
            <rdf:type rdf:resource="&ns-rdfs;Class"/>
            <rdfs:subClassOf rdf:resource="#ProfileComponent"/>
            <rdfs:label>Component:
CurrentProfileIdentification</rdfs:label>
            <rdfs:comment>This type of object represents the
current client profile identification.
            </rdfs:comment>
      </rdf:Description>
      <!--
      HardwarePlatform Component
      -->
      <rdf:Description rdf:ID="deviceType">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>The type of the used device
        Example: "Desktop", "Notebook", "Pocket PC", "Tablet Pc",
"Mobile phone"
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="deviceName">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>The name of the used device
        Example: "Compaq Presario S3000V"
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="deviceVendor">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>The device vendor
        Example: "Compaq"
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="screenDimension">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
```

```
                <rdfs:comment>The screen width X screen height. This
value must be positive.Example: "280X210", "500X800"
        </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="screenDimensionUnit">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>The unit for width and height.
        Example: "mm", "cm"
        </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="screenColor">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Has the value "True" if the device has a
color screen; "False" if it has a monochrome screen.
        </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="screenSize">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Number of resolution units horizontally
and vertically related to the screen size. This value must be
positive. Example: "1024X768", "800X600"
        </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="screenSizeUnit">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>The unit for resolution.
        Example: "pixels", "characters"
        </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="screenDepth">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Specifies the depth of the screen color
palette in bits required for displaying the element.
        Example: "1", "4", "8", "24", "32"
        </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="graphicsCapable">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Has the value "True" if the device is
capable of displaying graphics; "False" if the device is capable
of displaying only characters.
            </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="maxMemory">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdf:type rdf:resource="&ns-rdfs;Seq"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment> The maximum memory set of a given
device.Example: "RAM,128,MB",  "HARDDISK,40,GB"
        </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="avaMemory">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdf:type rdf:resource="&ns-rdfs;Seq"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
```

```
            <rdfs:comment>The available memory set of a given
device.Example: "RAM,128,MB",   "HARDDISK,40,GB"
         </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="systemProcessor">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Specifies the CPU on which a client
device may be running.
         Example: "arm", "amd athlon xp", "mips", "sh3", "x86em",
"unknown"
         </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="systemAudioDesc">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Specifies whether or not closed audio
descriptions should be rendered.
          Example: "True" means audio must be rendered, "False"
means audio must not be rendered.
          </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="systemVideoDesc">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Specifies whether or not closed video
descriptions should be rendered.
          Example: "True" means video must be rendered, "False"
means video must not be rendered.
          </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="systemCaptions">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Specifies whether or not text
descriptions should be rendered.
          Example: "True" means text descriptions must be
rendered, "False" means not.
          </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="systemLanguage">
         <rdf:type rdf:resource="&ns-rdfs;Property"/>
         <rdfs:domain rdf:resource="#HardwarePlatform"/>
         <rdfs:comment>The device supported language. A two-letter
value interpreted according to ISO standard
      639, "Code for the representation of names of languages"
[ISO 639].
         Example: "fr", "en", "de", etc.
         </rdfs:comment>
      </rdf:Description>
      <!--
      SoftwarePlatform Component
      -->
      <rdf:Description rdf:ID="osName">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#SoftwarePlatform"/>
            <rdfs:comment>The name of the Operating System used by
the client device.
            Example: "Windows CE", "win9x", "Windows Professionnel"
         </rdfs:comment>
      </rdf:Description>
```

```
        <rdf:Description rdf:ID="osVendor">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#SoftwarePlatform"/>
            <rdfs:comment>Vendor of the device's operating system.
          Example:  "Apple", "Microsoft"
            </rdfs:comment>
        </rdf:Description>
        <rdf:Description rdf:ID="osVersion">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#SoftwarePlatform"/>
            <rdfs:comment>The version of the Operating System used
by the client device.
            Example: "8.0"
          </rdfs:comment>
        </rdf:Description>
        <rdf:Description rdf:ID="AudioInputEncoder">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdf:type rdf:resource="&ns-rdfs;Bag"/>
            <rdfs:domain rdf:resource="#SoftwarePlatform"/>
            <rdfs:comment>List of audio input encoders supported
by the device.
          Example:  "G.711"
          </rdfs:comment>
        </rdf:Description>
        <rdf:Description rdf:ID="VideoInputEncoder">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdf:type rdf:resource="&ns-rdfs;Bag"/>
            <rdfs:domain rdf:resource="#SoftwarePlatform"/>
            <rdfs:comment>List of video input encoders supported
by the device.
          Examples:      "MPEG-1", "MPEG-2", "H.261"
            </rdfs:comment>
        </rdf:Description>
        <!--
        BrowserPreferences Profile Component
        -->
        <rdf:Description rdf:ID="usedPlayerName">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#BrowserPreferences"/>
            <rdfs:comment>The name of the player used by the
client, at a well determined session. The client can use many
players.
          Example: "MS IE"
            </rdfs:comment>
        </rdf:Description>
        <rdf:Description rdf:ID="usedPlayerVersion">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#BrowserPreferences"/>
            <rdfs:comment>The version of the player.
          Example: "5.5"
          </rdfs:comment>
        </rdf:Description>
        <rdf:Description rdf:ID="systemBitrate">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#BrowserPreferences"/>
            <rdfs:comment>
        The approximate bandwidth (given in bits per second)
available to the system.
        This property is similar to the averageCurrentBandwidth
property of the NetworkProfileSchema.
        Here, the given value is application specific.
```

```
        (This property is similar to the one introduced in SMIL
content control modules spec, used in another context)
        Example: "24000, 40000, etc."
        </rdfs:comment>
    </rdf:Description>
    <rdf:Description rdf:ID="systemComponent">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#BrowserPreferences"/>
            <rdfs:comment>
            Contains one or more URI seperated by a white space
(type: XML CDATA string).
            Each URI identifies a component of the playback client
device: client device component/feature, number of audio channels,
codec, video decoders, etc.(This property is similar to the one
introduced in SMIL content control modules spec, used in another
context)
            Example: video decoder, codec, etc.
        </rdfs:comment>
    </rdf:Description>
    <rdf:Description rdf:ID="onlySupportedResources">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdf:type rdf:resource="&ns-rdfs;Bag"/>
            <rdfs:domain rdf:resource="#BrowserPreferences"/>
            <rdfs:comment>
          The only supported set of resources or services.
Profiles of these last are denoted using links (the profile
element)
          This set is given generally when the it is small and
not already described by an existed schema.
          Example: "WML documents, wbmp images"
        </rdfs:comment>
    </rdf:Description>
    <rdf:Description rdf:ID="nonSupportedResources">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdf:type rdf:resource="&ns-rdfs;Bag"/>
            <rdfs:domain rdf:resource="#BrowserPreferences"/>
            <rdfs:comment>
          The list of the excluded resources.
          Note that if the non supported resource depends to a
particular set (WML, HTML, etc.), it is preferable to include it
on the corresponding profile.
          Example: "the non support of a resource from a
predefined set of supported resources"
        </rdfs:comment>
    </rdf:Description>
    <!--
    CurrentProfileIdentification Component
    -->
    <rdf:Description rdf:ID="profileId">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain
rdf:resource="#CurrentProfileIdentification"/>
            <rdfs:comment>General identification of client profile
instance.
        Example: "CompaqPresarioS3000V84686324734"
        </rdfs:comment>
    </rdf:Description>
   </rdf:RDF>
```

Esquema do Servidor de Conteúdo

```xml
<?xml version="1.0"?>
<!DOCTYPE rdf:RDF [
      <!ENTITY ns-rdf 'http://www.w3.org/1999/02/22-rdf-syntax-
ns#'>
      <!ENTITY ns-rdfs 'http://www.w3.org/2000/01/rdf-schema#'>
      <!ENTITY ns-hcv 'file:///h:/HCM/schema/ServerProfileSchema-
20030408#'>
]>
<!--
  This is the RDF Schema for describing  "The Proxy/Server
Profile".
  The Server Profile describes general characteristics of the
server device which includes hardware plataform and software
plataform. Author: Propriedade do Laboratório Telemídia, April
2003.
-->
<rdf:RDF xmlns:rdf="&ns-rdf;" xmlns:rdfs="&ns-rdfs;"
xmlns:hcv="&ns-hcv;">
      <rdf:Description rdf:ID="ProfileComponent">
            <rdf:type rdf:resource="&ns-rdfs;Class"/>
            <rdfs:subClassOf rdf:resource="&ns-rdfs;Resource"/>
            <rdfs:label>Component</rdfs:label>
            <rdfs:comment>This class describe the different Server
Profile components </rdfs:comment>
      </rdf:Description>
      <!--
       Properties shared among the components
        -->
      <rdf:Description rdf:ID="component">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:label>component</rdfs:label>
            <rdfs:comment>The component attribute links the
various components to the root node
      (profile).
          </rdfs:comment>
      </rdf:Description>
      <!--
      Main Server Profile Components
      -->
      <rdf:Description rdf:ID="HardwarePlatform">
            <rdf:type rdf:resource="&ns-rdfs;Class"/>
            <rdfs:subClassOf rdf:resource="#ProfileComponent"/>
            <rdfs:label>Component: HardwarePlatform</rdfs:label>
            <rdfs:comment>Describes properties of the device
Hardware.
          </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="SoftwarePlatform">
            <rdf:type rdf:resource="&ns-rdfs;Class"/>
            <rdfs:subClassOf rdf:resource="#ProfileComponent"/>
            <rdfs:label>Component: SoftwarePlatform</rdfs:label>
            <rdfs:comment>Describes properties of the device
application environment, operating system, and installed software.
OS, etc.
          </rdfs:comment>
      </rdf:Description>
      </rdf:Description>
            <rdf:Description
rdf:ID="CurrentProfileIdentification">
```

```
            <rdf:type rdf:resource="&ns-rdfs;Class"/>
            <rdfs:subClassOf rdf:resource="#ProfileComponent"/>
            <rdfs:label>Component:
CurrentProfileIdentification</rdfs:label>
            <rdfs:comment>This type of object represents the
current server profile identification.
            </rdfs:comment>
      </rdf:Description>
      <!--
      HardwarePlatform Component
      -->
      <rdf:Description rdf:ID="numberOfProcessors">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Number of processors used by the server.
        Example: "2", " 8"
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="ramCapacity">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdf:type rdf:resource="&ns-rdfs;Bag"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>The size of RAM memory.
        Example: "4,GB"
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="processorSpeed">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdf:type rdf:resource="&ns-rdfs;Bag"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>The processor speed supported by the
server.
        Example: "900,Mhz"
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="serverArchitecture">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>The server architecture (given in bits).
        Example: "32" , "64"
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="diskArray">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Indicates whether the server has disk
array or not
          Example: "Yes" means has disk array. "No" means has not
disk array.
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="nicTransferRate">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdf:type rdf:resource="&ns-rdfs;Bag"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Server transfer rate.
        Example: "10,MB", "100,MB", "1,GB"
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="transactionPerMinute">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
```

```
              <rdfs:domain rdf:resource="#HardwarePlatform"/>
              <rdfs:comment>Server throughput (given in minutes)
            Example: "1.24" per minute
          </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="cacheMemory">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdf:type rdf:resource="&ns-rdfs;Bag"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>The size of cache memory
            Examples:   "1,GB"
            </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="redundantPowerSupply">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Indicates whether the server has or not
redundant power supply
            Example: "Yes", "No"
          </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="cluster">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>Indicates whether the server is within a
cluster ou alone
            Example: "Yes", "No"
          </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="numberOfConnection">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#HardwarePlatform"/>
            <rdfs:comment>The number of client devices connected
            Example: "14"
          </rdfs:comment>
      </rdf:Description>
      <!--
      SoftwarePlatform Component
      -->
      <rdf:Description rdf:ID="osName">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#SoftwarePlatform"/>
            <rdfs:comment>The name of the Operating System used by
the server
         Example: "Unix", "Windows NT"
          </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="osVendor">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#SoftwarePlatform"/>
            <rdfs:comment>Vendor of the server's operating system.
            Examples:    "Intel", "Microsoft"
            </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="osVersion">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#SoftwarePlatform"/>
            <rdfs:comment>The version of the Operating System used
by the server.
          Example: "8.0"
          </rdfs:comment>
```

```
        </rdf:Description>
        <rdf:Description rdf:ID="serviceType">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#SoftwarePlatform"/>
            <rdfs:comment>The version of the Operating System used
by the server.
            Example: "proxy", "web server", "file server",
"firewall", "gateway", "application server" etc
        </rdfs:comment>
        </rdf:Description>
        <!--
        CurrentProfileIdentification Component
        -->
        <rdf:Description rdf:ID="profileId">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain
rdf:resource="#CurrentProfileIdentification"/>
            <rdfs:comment>General identification of server profile
instance.
        Example: "HP84686324734"
        </rdfs:comment>
        </rdf:Description>
    </rdf:RDF>
```

Esquema da Rede de Acesso

```
<?xml version="1.0"?>
<!DOCTYPE rdf:RDF [
    <!ENTITY ns-rdf 'http://www.w3.org/1999/02/22-rdf-syntax-
ns#'>
    <!ENTITY ns-rdfs 'http://www.w3.org/2000/01/rdf-schema#'>
    <!ENTITY ns-hcv 'file:///h:/HCM/schema/NetworkProfileSchema-
20030408#'>
]>
<rdf:RDF xmlns:rdf="&ns-rdf;" xmlns:rdfs="&ns-rdfs;"
xmlns:hcv="&ns-hcv;">
    <rdf:Description rdf:ID="ProfileComponent">
        <rdf:type rdf:resource="&ns-rdfs;Class"/>
        <rdfs:subClassOf rdf:resource="&ns-rdfs;Resource"/>
        <rdfs:label>Component</rdfs:label>
        <rdfs:comment>This class describe the different
Network Profile components.                        Author:
Propriedade do Laboratório Telemídia, April 2003.
            </rdfs:comment>
    </rdf:Description>
    <!--
     Properties shared among the components
     -->
    <rdf:Description rdf:ID="component">
        <rdf:type rdf:resource="&ns-rdfs;Property"/>
        <rdfs:label>component</rdfs:label>
        <rdfs:comment>The component attribute links the
various components to the root node
    (profile).
        </rdfs:comment>
    </rdf:Description>
    <!--
    Main Network Profile Components
    -->
    <rdf:Description rdf:ID="CurrentNetworkDescription">
```

```
                <rdf:type rdf:resource="&ns-rdfs;Class"/>
                <rdfs:subClassOf rdf:resource="#ProfileComponent"/>
                <rdfs:comment>Describes the current network
characteristics
            </rdfs:comment>
        </rdf:Description>
        <!--
         "Current Network Description" Profile Component
        -->
        <rdf:Description rdf:ID="averageCurrentBandwidth">
                <rdf:type rdf:resource="&ns-rdfs;Property"/>
                <rdfs:domain
rdf:resource="#CurrentNetworkDescription"/>
                <rdfs:comment>The average current bandwidth (given in
bits per second)
            Example: "256000, 128000, etc."
            </rdfs:comment>
        </rdf:Description>
        <rdf:Description rdf:ID="communicationProtocol">
                <rdf:type rdf:resource="&ns-rdfs;Property"/>
                <rdfs:domain
rdf:resource="#CurrentNetworkDescription"/>
                <rdfs:comment>The protocol used in the network
communication
            Example: "HTTP, RTP, RTSP, etc."
            </rdfs:comment>
        </rdf:Description>
        </rdf:RDF>
```

Esquema do Perfil do Usuário

```
<?xml version="1.0"?>
<!DOCTYPE rdf:RDF [
  <!ENTITY ns-rdf  'http://www.w3.org/1999/02/22-rdf-syntax-ns#'>
  <!ENTITY ns-rdfs 'http://www.w3.org/2000/01/rdf-schema#'>
  <!ENTITY ns-prf 'http://www.wapforum.org/UAPROF/ccppschema-
20010330#'>
  <!ENTITY ns-hcv 'file:///h:/HCM/schema/UserProfileSchema-
20030521#'>
]>
<rdf:RDF xmlns:rdf="&ns-rdf;" xmlns:rdfs="&ns-rdfs;"
xmlns:prf="&ns-prf;" xmlns:hcv="&ns-hcv;">
        <rdf:Description rdf:ID="ProfileComponent">
                <rdf:type rdf:resource="&ns-rdfs;Class"/>
                <rdfs:subClassOf rdf:resource="&ns-rdfs;Resource"/>
                <rdfs:label>ProfileComponent</rdfs:label>
                <rdfs:comment>
        A Component within the CC/PP Schema is a class of related
properties that describe the user preferences information. Author:
Propriedade do Laboratório Telemídia, April 2003.
    </rdfs:comment>
        </rdf:Description>
        <!--
         Properties shared among the components
          -->
        <rdf:Description rdf:ID="component">
                <rdf:type rdf:resource="&ns-rdfs;Property"/>
                <rdfs:label>component</rdfs:label>
                <rdfs:comment>The component attribute links the
various components to the root node
```

```
      (profile).
          </rdfs:comment>
      </rdf:Description>
      <!--
      Main User Profile Components
      -->
      <rdf:Description rdf:ID="Preferences">
          <rdf:type rdf:resource="&ns-rdfs;Class"/>
          <rdfs:subClassOf rdf:resource="#ProfileComponent"/>
          <rdfs:label>Component: Preferences</rdfs:label>
          <rdfs:comment>This type of object represents the
description that can be used to define the hardware capabilities
of a given device.
          </rdfs:comment>
      </rdf:Description>
      </rdf:Description>
          <rdf:Description
rdf:ID="CurrentProfileIdentification">
          <rdf:type rdf:resource="&ns-rdfs;Class"/>
          <rdfs:subClassOf rdf:resource="#ProfileComponent"/>
          <rdfs:label>Component:
CurrentProfileIdentification</rdfs:label>
          <rdfs:comment>This type of object represents the
current user profile identification.
          </rdfs:comment>
      </rdf:Description>
      <!--
      Preferences
      -->
      <rdf:Description rdf:ID="userID">
          <rdf:type rdf:resource="&ns-rdfs;Property"/>
          <rdfs:domain rdf:resource="#Preferences"/>
          <rdfs:comment>User identification
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="deviceType">
          <rdf:type rdf:resource="&ns-rdfs;Property"/>
          <rdfs:domain rdf:resource="#Preferences"/>
          <rdfs:comment>The type of device that user preferences
apply to
        Example: "Desktop", "Notebook", "Pocket PC", "Tablet PC",
"Mobile phone"
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="screenColor">
          <rdf:type rdf:resource="&ns-rdfs;Property"/>
          <rdfs:domain rdf:resource="#Preferences"/>
          <rdfs:comment>Has the value "True" if the device has a
color screen; "False" if it has a monochrome screen.
          </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="screenSize">
          <rdf:type rdf:resource="&ns-rdfs;Property"/>
          <rdfs:domain rdf:resource="#Preferences"/>
          <rdfs:comment>Number of resolution units horizontally
and vertically. This value must be positive.
        Example: "1024X768", "800X600"
        </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="screenSizeUnit">
          <rdf:type rdf:resource="&ns-rdfs;Property"/>
```

```
            <rdfs:domain rdf:resource="#Preferences"/>
            <rdfs:comment>The unit for resolution.
        Example: "pixels", "characters"
            </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="screenDepth">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#Preferences"/>
            <rdfs:comment>Specifies the depth of the screen color
palette in bits required for displaying the element.
        Example: "1", "4", "8", "24", "32"
            </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="graphicsCapable">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#Preferences"/>
            <rdfs:comment>Has the value "True" if the device is
capable of displaying graphics; "False" if the device is capable
of displaying only characters.
             </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="systemAudioDesc">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#Preferences"/>
            <rdfs:comment>Specifies whether or not closed audio
descriptions should be rendered.
         Example: "True" means audio must be rendered, "False"
means audio must not be rendered.
            </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="systemVideoDesc">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#Preferences"/>
            <rdfs:comment>Specifies whether or not closed video
descriptions should be rendered.
         Example: "True" means video must be rendered, "False"
means video must not be rendered.
            </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="systemCaptions">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain rdf:resource="#Preferences"/>
            <rdfs:comment>Specifies whether or not text
descriptions should be rendered.
          Example: "True" means text descriptions must be
rendered, "False" means not.
             </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="systemLanguage">
          <rdf:type rdf:resource="&ns-rdfs;Property"/>
          <rdfs:domain rdf:resource="#Preferences"/>
          <rdfs:comment>The device supported language. A two-letter
value interpreted according to ISO standard
       639, "Code for the representation of names of languages"
[ISO 639].
          Example: "fr", "en", "de", etc.
          </rdfs:comment>
      </rdf:Description>
      <rdf:Description rdf:ID="audioInputEncoder">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdf:type rdf:resource="&ns-rdfs;Seq"/>
```

```
                 <rdfs:domain rdf:resource="#Preferences"/>
                 <rdfs:comment>List of audio input encoders preferred
by the user.
        Example:  "G.711"
         </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="videoInputEncoder">
             <rdf:type rdf:resource="&ns-rdfs;Property"/>
             <rdf:type rdf:resource="&ns-rdfs;Seq"/>
             <rdfs:domain rdf:resource="#Preferences"/>
             <rdfs:comment>List of video input encoders preferred
by the user.
          Examples:      "MPEG-1", "MPEG-2", "H.261"
          </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="image">
             <rdf:type rdf:resource="&ns-rdfs;Property"/>
             <rdf:type rdf:resource="&ns-rdfs;Seq"/>
             <rdfs:domain rdf:resource="#Preferences"/>
             <rdfs:comment>A list that gives preferred resources
ordered within a user priority from highest to lowest.
                   The range of the value is left to the
negotiation strategy.
            Example: "wbmp", "gif"
          </rdfs:comment>
     </rdf:Description>
     <rdf:Description rdf:ID="frequentVisitedSites">
             <rdf:type rdf:resource="&ns-rdfs;Property"/>
             <rdf:type rdf:resource="&ns-rdfs;Seq"/>
             <rdfs:domain rdf:resource="#Preferences"/>
             <rdfs:comment>A list of frequent visited sites and
most common links accessed by the user per site.
         Example:
"www.oglobo.com.br,http://oglobo.globo.com/oglobo/suplementos/revi
stadatv/,http://oglobo.globo.com/oglobo/economia/",

"www.amazon.com,http://www.amazon.com/exec/obidos/tg/browse/-
/502394/ref=gw_br_p/103-7170356-1851854,
http://www.amazon.com/exec/obidos/tg/browse/-
/761198/ref=p_hp_ct_1_1/103-7170356-1851854"
          </rdfs:comment>
     </rdf:Description>
     <!--
     CurrentProfileIdentification Component
     -->
     <rdf:Description rdf:ID="profileId">
            <rdf:type rdf:resource="&ns-rdfs;Property"/>
            <rdfs:domain
rdf:resource="#CurrentProfileIdentification"/>
            <rdfs:comment>General identification of user profile
instance.
        Example: "84686324734"
         </rdfs:comment>
     </rdf:Description>
    </rdf:RDF>
```