

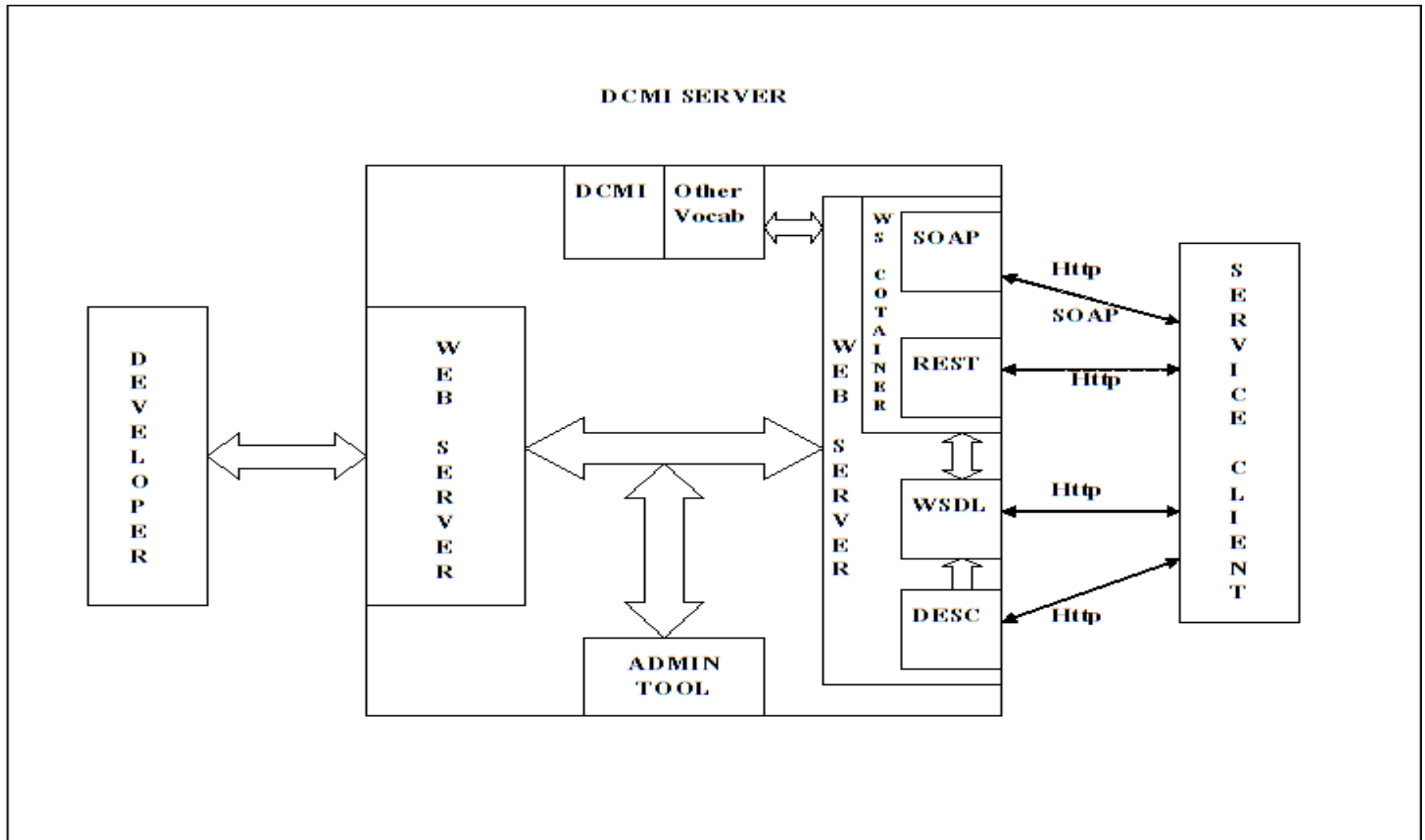
Web Services as DC-Tool's Infrastructure

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- DC tools
- Proposed framework
- Web services
- SOAP-full web services
- Rest-full web services
- Examples

- <http://dublincore.org/tools/> (about 45 tools).
- Description about the tools ?
- How to use ?
- Online outputs.
- Interoperability with open sources.

Framework



- Open standard (XML) based Web applications that interact with other web applications for the purpose of exchanging data.
- Initially used for the exchange of data on large private enterprise networks
- Now web services have evolved as a standard for exchanging data over the public Internet.

- One can describe a web service as an application component that:
 - Communicates via open protocols (HTTP, SMTP, etc.)
 - Processes XML messages
 - Describes its messages using XML Schema
 - Describes itself using WSDL
 - Find and bind using UDDI

- WSDL file:

http://134.106.31.103:2689/axis/DCMI_Services.jws?wsdl

Services:

- 1.) get DCElement
- 2.) get_DC_Alternatives
- 3.) get_DC4SOIF
- 4.) get_LeadtoDC

DC for SOIF



C:\myprograms\DCMI_Clients\Client_Get_DC4SOIF.exe

Please enter a SOIF Element name

author

Conneting to Web Service...

The approx corresponding DC element forauthor = DC.Creator

Press ENTER to Exit

DC Alternatives



C:\myprograms\DCMI_Clients\Client_Get_Alter.exe

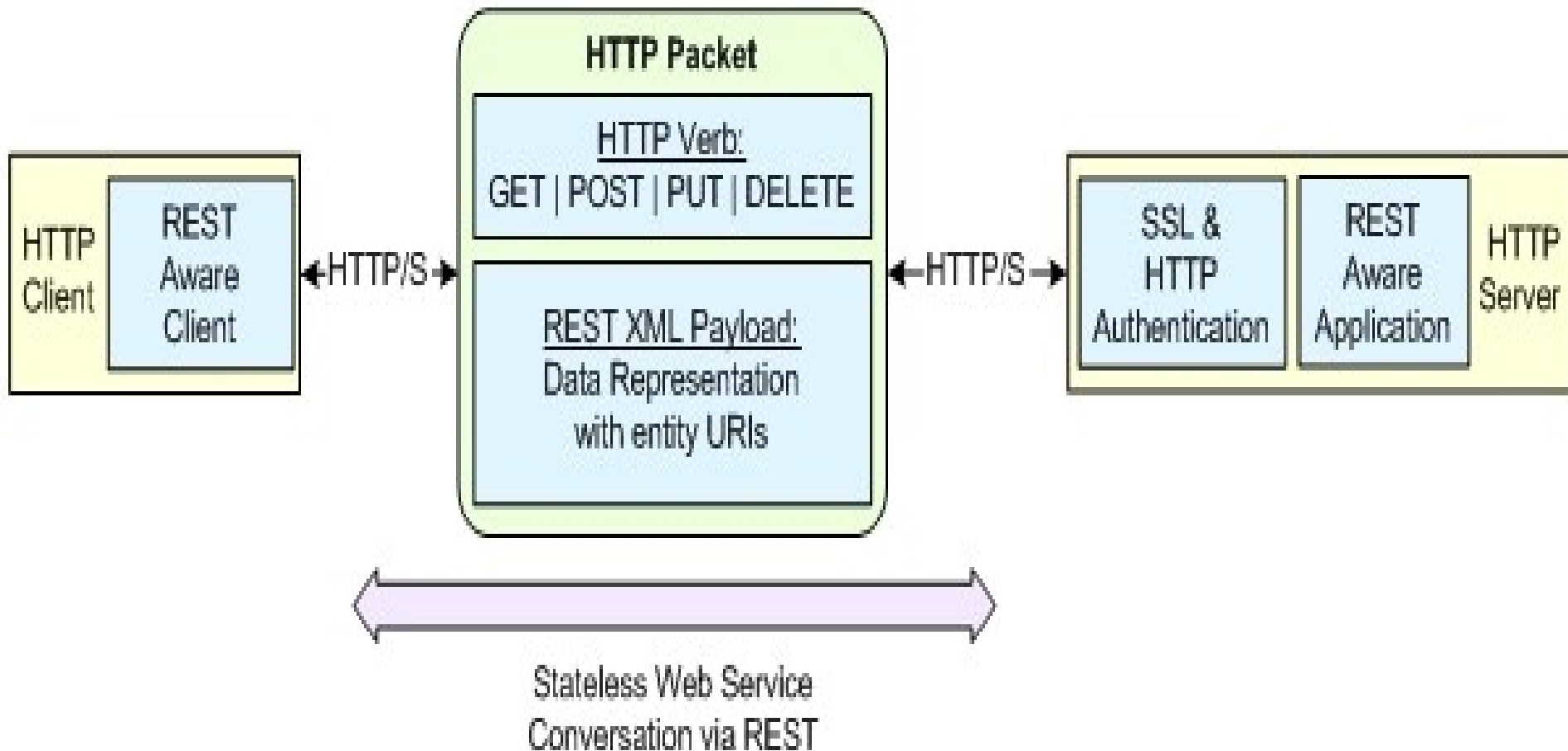
```
Please enter a Element name
createore
Conneting to Web Service...

Dublin Core   :  Creator
French       :  Crateur
Italian      :  Creatore
German       :  Verfasser o. Urheber
Spanish      :  Autor o Creador
Press ENTER to Exit
```

- REST is an acronym standing for Representational State Transfer.
- REST is a term coined by Roy Fielding in his Ph.D. dissertation to describe an **architecture style** of networked systems.
- REST an Architectural Style , not a standard.

- Plain XML is the data representation format.
- HTTP is the transfer protocol.
- HTTP's GET, POST, PUT, and DELETE are the access/manipulation verbs.
- URIs point to individual data records (such as catalog items or customer info).
- HTTP authentication and SSL provide security.

REST Web Service





Address http://131.173.196.223/dc/creator?rep=rdf/xml

Links TOSHIBA Access Customize Links Free Hotmail RealPlayer Windows Windows Marketplace Yahoo! Bookmarks My Yahoo! Yahoo! Yahoo!

 Search Web


```
<?xml version="1.0" encoding="UTF-8" ?>
```

```
- <rdf:RDF xmlns:dcterms="http://purl.org/dc/terms/" xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#" xmlns:dc="http://purl.org/dc/elements/1.1/">
```

```
- <rdf:Description rdf:about="http://localhost/dc/creator">
```

```
  <dc:type rdf:resource="http://dublincore.org/usage/documents/principles/#element" />
```

```
  <rdfs:label xml:lang="en-US">Creator</rdfs:label>
```

```
  <dc:description xml:lang="en-US">Examples of a Creator include a person, an organisation, or a service. Typically, the name
    of a Creator should be used to indicate the entity.</dc:description>
```

```
  <rdf:type rdf:resource="http://www.w3.org/1999/02/22-rdf-syntax-ns#Property" />
```

```
  <dcterms:hasVersion rdf:resource="http://dublincore.org/usage/terms/history/#creator-004" />
```

```
  <rdfs:isDefinedBy rdf:resource="http://purl.org/dc/elements/1.1/" />
```

```
  <rdfs:comment xml:lang="en-US">An entity primarily responsible for making the content of the resource.</rdfs:comment>
```

```
  <dcterms:issued>1999-07-02</dcterms:issued>
```

```
  <dcterms:modified>2002-10-04</dcterms:modified>
```

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

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

- <http://www.dlib.org/dlib/january00/chandler/chandler-appendixB.html>
- http://www.ukoln.ac.uk/metadata/interoperability/soif_dc.html
- <http://www.schemaweb.info/webservices/RestServiceDetails.aspx#GetRDF>
- <http://www.fis.utoronto.ca/special/metadata/cmecr/DCcrosswalkNAME.html>

Thank You

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