



# Introduction to Web service and WSRF

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### Web service

**Enabling Grids for E-science** 

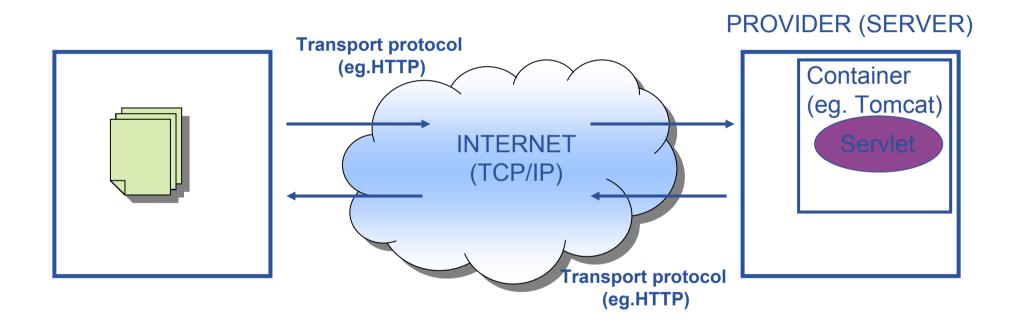
#### Web services are

 Applications that enable remote procedure calls over a network or the Internet often using XML and HTTP

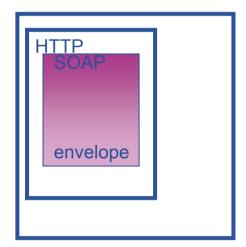
#### Benefits

- This allows us to hide the details of how a service is implemented; only URL and data types are required
- It is largely irrelevant to the client whether the service is developed with Java or ASP.NET or if it is running on Windows, Linux or any other platform

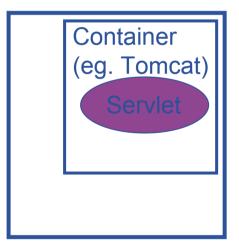




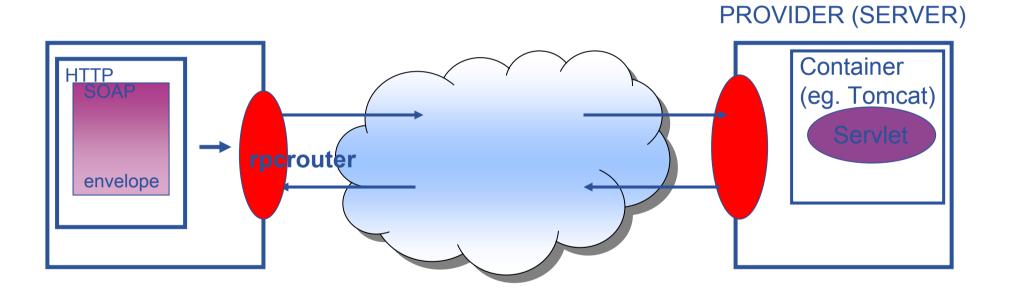




#### PROVIDER (SERVER)









**Application** Application (servlet) rpcrouter Web server SOAP SOAP HTTP HTTP TCP/IP TCP/IP Infrastructure Infrastructure (Data link) (Data link)



# **Underlying standards**

- The basic standards for web services are:
- SOAP (simple object access protocol)
- WSDL (web services description language)
- UDDI (universal description, discovery and integration)

- Describes the Web Service and defines the functions that are exposed in the Web Service
- Defines the XML grammar to be used in the messages
  - Uses the W3C Schema language



# Web service and Grid computing

**Enabling Grids for E-sciencE** 





# **WSRF** specifications

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