

Introduction

Thursday, January 28, 2021 1:07 PM

What is a service?

- Tiny s/w application hosted on a web

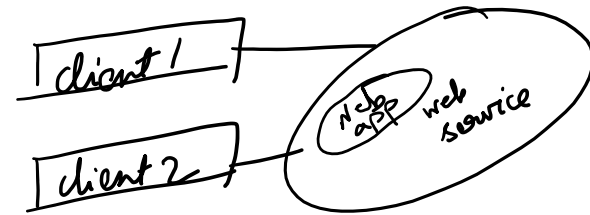
Client: host service and get benefitted (web browser)

Using a credit card online - press submit button - all details - web service/app invoked - transaction performed

Windows client to invoke web service

Web service v/s application

- Multiple services make an application that operates 24/7
- Can be scaled up or down
- Web application need browser to run
- Web services may run without browser



Scripting languages (PHP), Java (**Java servlets**)

Many clients can invoke web service/app, requires powerful hardware

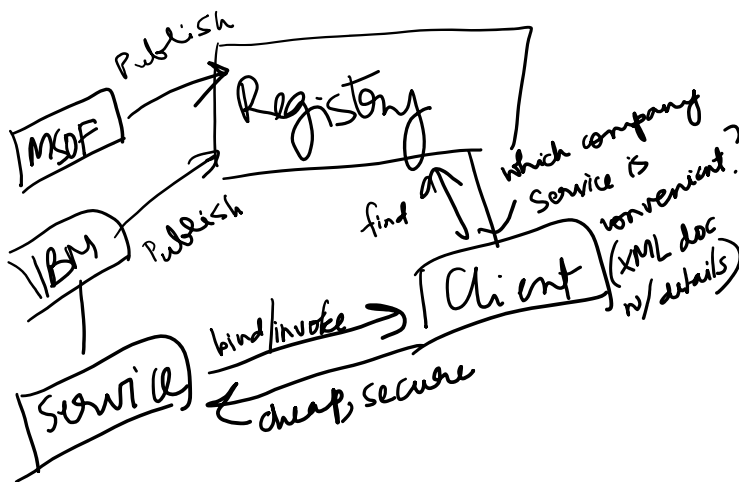
- Internet information server (IIS)
- Apache web server (open source)

Web server is a **self-describing** application that runs on an **app server**

Eg. Weather forecast service: (WSL doc: XML that describes web service; name, parameters, where is it hosted?, secure?)

Service Oriented Architecture

Registry: centralized place where people publish information about a web service



Client uses services provided by WSPs

Company -> web service provider (WSP)

Web applications do not use service oriented architecture - no self-describing feature - in-house -

XML: information contained is marked

<contact>

<name>Suha Amber</name>

<country>UAE</country>

</contact>

- Gives meaningful information(data structure for any entity) (unlike HTML where there is only display information)
- Platform(OS) and language independent
- Text-based protocol
- Represent letters as ASCII values (this makes XML cross-platform and language independent)
- Selective encryption (better than HTTPS security)

Sender: creates XML

Receiver: parses XML

Altova XML editor

1. SOAP-based webservices (XML based protocol)
2. RST-based web services