

Discover Remote Services

ECF- Eclipse Communication Framework

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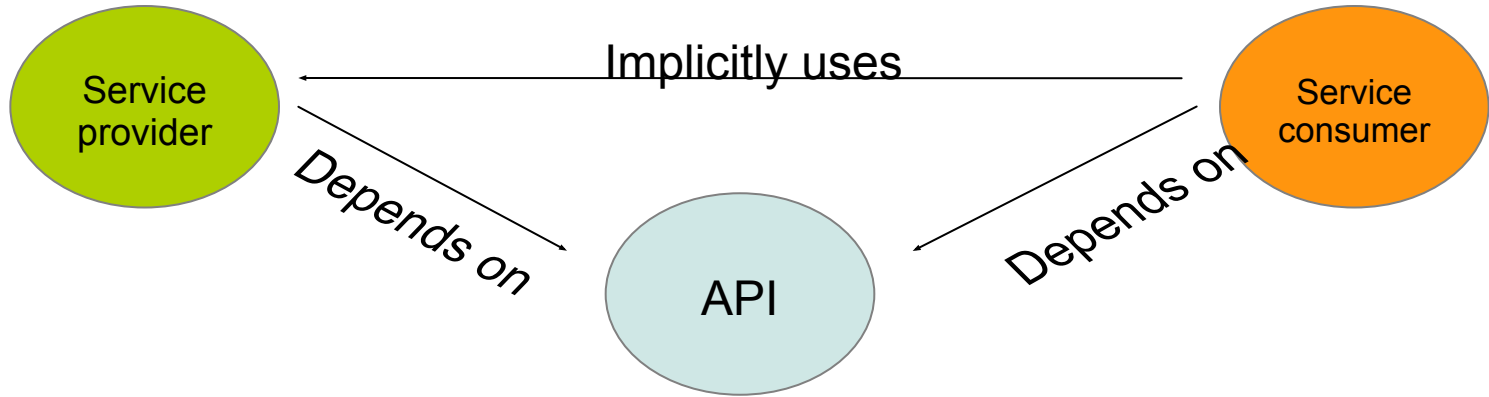
Discover Remote Services

- OSGi Services
- Remoting Concepts
- Discovery
- Demo
- Price Ceremony

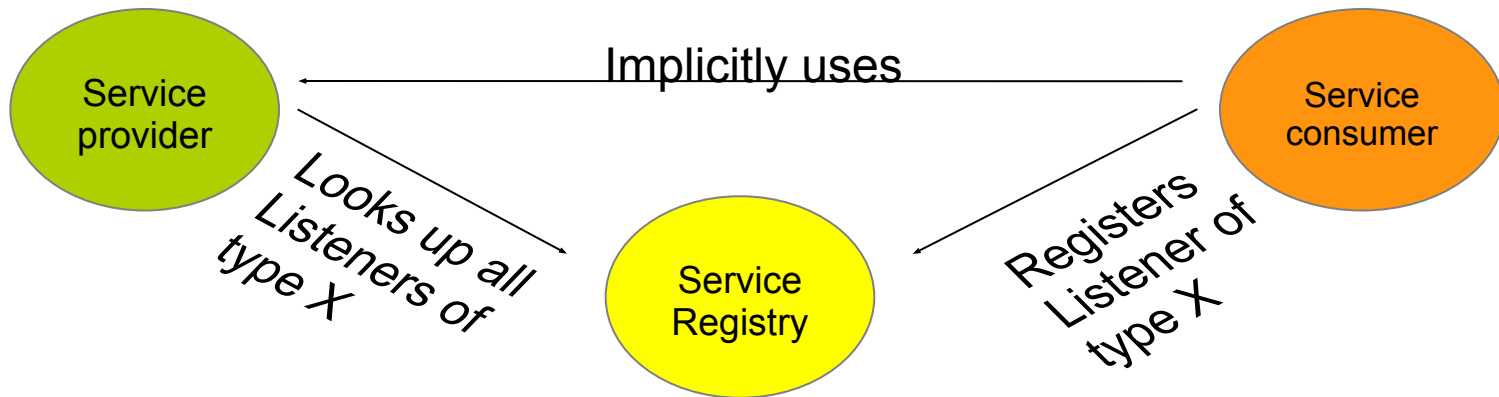
**Everything you
always wanted to
know about
OSGi services**

(but were afraid to ask)

OSGi whiteboard pattern recap



OSGi whiteboard pattern recap



(Type X is defined by provider or additional API bundle)

Fallacies of Distributed Computing



The network is reliable.

Latency is zero.

Bandwidth is infinite.

The network is secure.

Topology doesn't change.

There is one administrator.

“A distributed system is one in which the failure of a computer you didn't even know existed can render your own computer unusable”

[Lamport]

Remoting Concepts

Discovery

Time for a Demo

What have we cooked?

Chat Application

Server for Discovery (Zookeeper and DNS)

Remoting (R_OSGI, ECF Native)

ChatBot for some content

Two modes: Centralistic and p2p

ECF Architecture

local	discovery	manager	transport	remote
	File		r_osgi	
	Zookeeper		ECF	
Service	DNS	RemoteService Admin (RSA)	JMS	Service-proxy
	Bonjour		REST	
	SLP		XMPP	
	

Demo

Demo

ECF Remote Services Chat: jongw@172.17.3.13: OSGi chat #2

New Chat

OSGi chat #2

17:07:23	QOTD@build.vogella.com	has joined the building
17:07:34		has left the building
17:07:46	QOTD@build.vogella.com	has joined the building
17:07:47		has left the building
17:07:58	QOTD@build.vogella.com	Einstein: Gravitation is not responsible for people falling in love.
17:07:58	QOTD@build.vogella.com	has joined the building
17:08:04		has left the building
17:08:10	QOTD@build.vogella.com	has joined the building
17:08:16	OSGi chat #2	HELLO WORLD!!!!
17:08:16	OSGi chat #2	has joined the building
17:08:16		has left the building
17:08:17		has left the building

OSGi chat #2
jongw@172.17.3.13

Send

OSGi chat #2

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17:08:16		has left the building
17:08:17		has left the building

OSGi chat #2
jongw@172.17.3.13

Send

OSGi chat #3

Login

Handle: OSGi chat #3

DiscoServer: zk://disco.ecf-project.org

Centralistic Mode

Go online

Instructions

```
git clone https://github.com/ECF/Chat  
cd Chat  
mvn verify  
chat_win32_x64
```


Downloads

Chat Client: <http://goo.gl/G3IH7f>

Chat Server: <http://goo.gl/bCSW3j>

ECF's asynchronous RS

```
package org.eclipse.ecf.example.chat.model;

import java.util.concurrent.Future;

import org.eclipse.ecf.remoteservice.IAsyncRemoteServiceProxy;

// Interface only needed on caller side
public interface IChatServerListenerAsync extends IAsyncRemoteServiceProxy {
    /**
     * Async for {@link IChatServerListener#getHandle()}
     */
    Future<String> getHandleAsync();
}
```

ECF's RSA implementation

Passes OSGi R5 compliance tests*

* MOD known CT failures

Discover Waldo?!

Price Ceremony

Q&A

THANKS!!!

**PLEASE RATE THIS
TALK**

Distributed Eventing

Uses ECF's distributed eventing to sync up servers

[\[http://blog.osgi.org/2013/06/distributed-eventing-rfp-158-now.html\]](http://blog.osgi.org/2013/06/distributed-eventing-rfp-158-now.html)

[\[http://wiki.eclipse.org/EIG:Distributed_EventAdmin_Service\]](http://wiki.eclipse.org/EIG:Distributed_EventAdmin_Service)