

A person is shown from the chest up, holding a globe of the Earth. The person's hands are visible, and they are wearing a dark jacket. The globe is the central focus, showing continents and oceans. A bright blue glow surrounds the globe and the person's hands, creating a halo effect. The background is dark, making the blue glow stand out.

SOA & GIS:

Using BPEL to Extend your Enterprise **2007**

Electric & Gas User Group Conference
Ian Fitzgerald, GISP – Truckee Donner PUD

"Things should be made as simple as possible, but no simpler."

-- Albert Einstein

Service Orientated Architecture

Far too many of today's Integration have failed Einstein's test.

They:

- Contain real dependencies
- Cannot be reused
- Built with O-O languages

SOA

Defines the architecture to reduce these dependencies; thus achieve...

Loose Coupling

Service Orientated Architecture

via web services

“Artificial dependencies should be reduced to the minimum but real dependencies should not be altered.”

Planning for Success

Web Services

What is it?

Service Orientated Architecture

- Interfaces must be based on Internet protocols such as **HTTP**, **FTP**, and **SMTP**.
- Except for binary data attachment, messages must be in **XML** in **SOAP** format.
- The description of a service must be in **WSDL**.
- Transactions are message based:
 - Asynchronous
 - Synchronous (Real Time)

I thought this was suppose to be easy?
My head feels like this?

Service
Orientated
Architecture



BPEL can cure these headaches

Much like ESRI's Model Builder

Drag and Drop in a logical order

Service Orientated Architecture

Defines connections to:

Databases

Files

Message Queues

Applications

Notification Services

Other Web Services

Automatically builds the requirements of
a web service for you.

Planning for Success

Example Uses

- Notification of Project status change
- Text Message Crews when Outage fault location is considered probable
- Move and update records maintained in multiple databases real time on transactional basis
- Allows creation of real time integration procedures defined by Multispeak v.3