



Enterprise Temporal Web Services in Disaster Management Planning

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Problem Statement



- Major Natural Disaster



Problem Statement - Needs



- Communication
 - Ground-based
 - Satellite
- Commercial imagery support
- Integration into enterprise architecture

A screenshot of a web browser window showing an XML response from a StkWebService. The browser's address bar shows the URL: http://softwareservices.agi.com/StkWebServices/Stkwebservice.asmx/GetTrackData... The XML content is as follows:

```
<?xml version="1.0" encoding="utf-8" ?>
- <ArrayOfLLA xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://tempuri.org/STKWebService/STKWebService">
- <LLA>
  <UTCSTime>21 Sep 2006 00:00:00.000000000</UTCSTime>
  <Latitude>-0.014980096218804374</Latitude>
  <Longitude>108.19089428942557</Longitude>
  <AltitudeInFeet>117397897.15656623</AltitudeInFeet>
</LLA>
- <LLA>
  <UTCSTime>21 Sep 2006 00:10:00.000000000</UTCSTime>
  <Latitude>-0.014984527716494191</Latitude>
  <Longitude>108.19127348706392</Longitude>
  <AltitudeInFeet>117398045.32520074</AltitudeInFeet>
</LLA>
- <LLA>
  <UTCSTime>21 Sep 2006 00:20:00.000000000</UTCSTime>
  <Latitude>-0.014960358616127982</Latitude>
  <Longitude>108.19164686563833</Longitude>
  <AltitudeInFeet>117398218.40149149</AltitudeInFeet>
</LLA>
- <LLA>
  <UTCSTime>21 Sep 2006 00:30:00.000000000</UTCSTime>
  <Latitude>-0.014907668082591126</Latitude>
  <Longitude>108.19201352802753</Longitude>
  <AltitudeInFeet>117398416.06016122</AltitudeInFeet>
</LLA>
- <LLA>
  <UTCSTime>21 Sep 2006 00:40:00.000000000</UTCSTime>
```

Solution

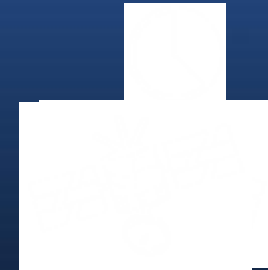
- Application accurately analyzes dynamic objects in real or simulated time
 - Real-time
 - Reacting to an event
 - Modeled
 - Analytical mode (pre- and post-event)

Solution



- AGI Technology Demonstration
 - Hurricane Katrina scenario

AGI basics



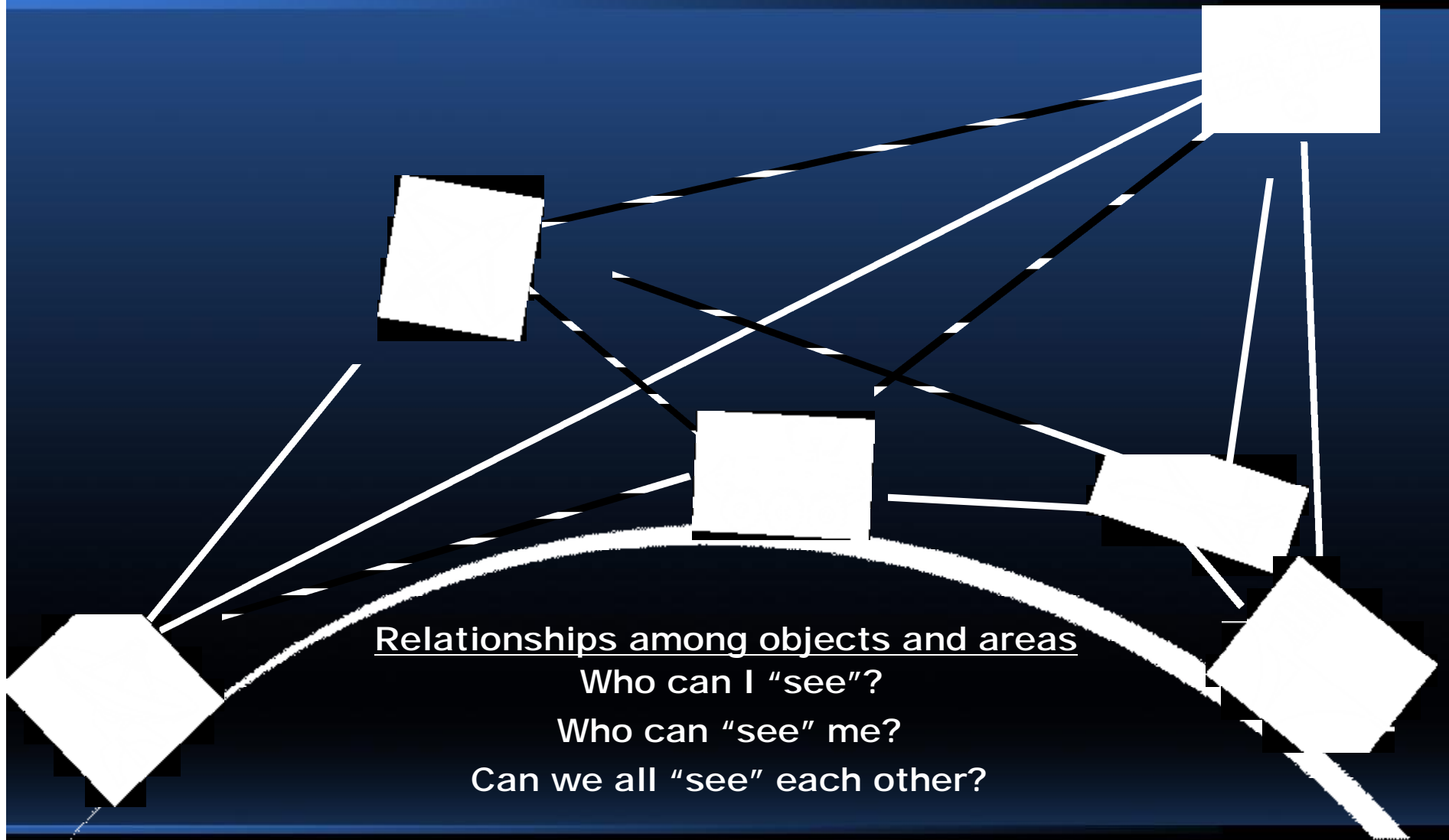
Time-dynamic position and attitude

Where am I now?

Where will I be?

How am I oriented?

AGI basics



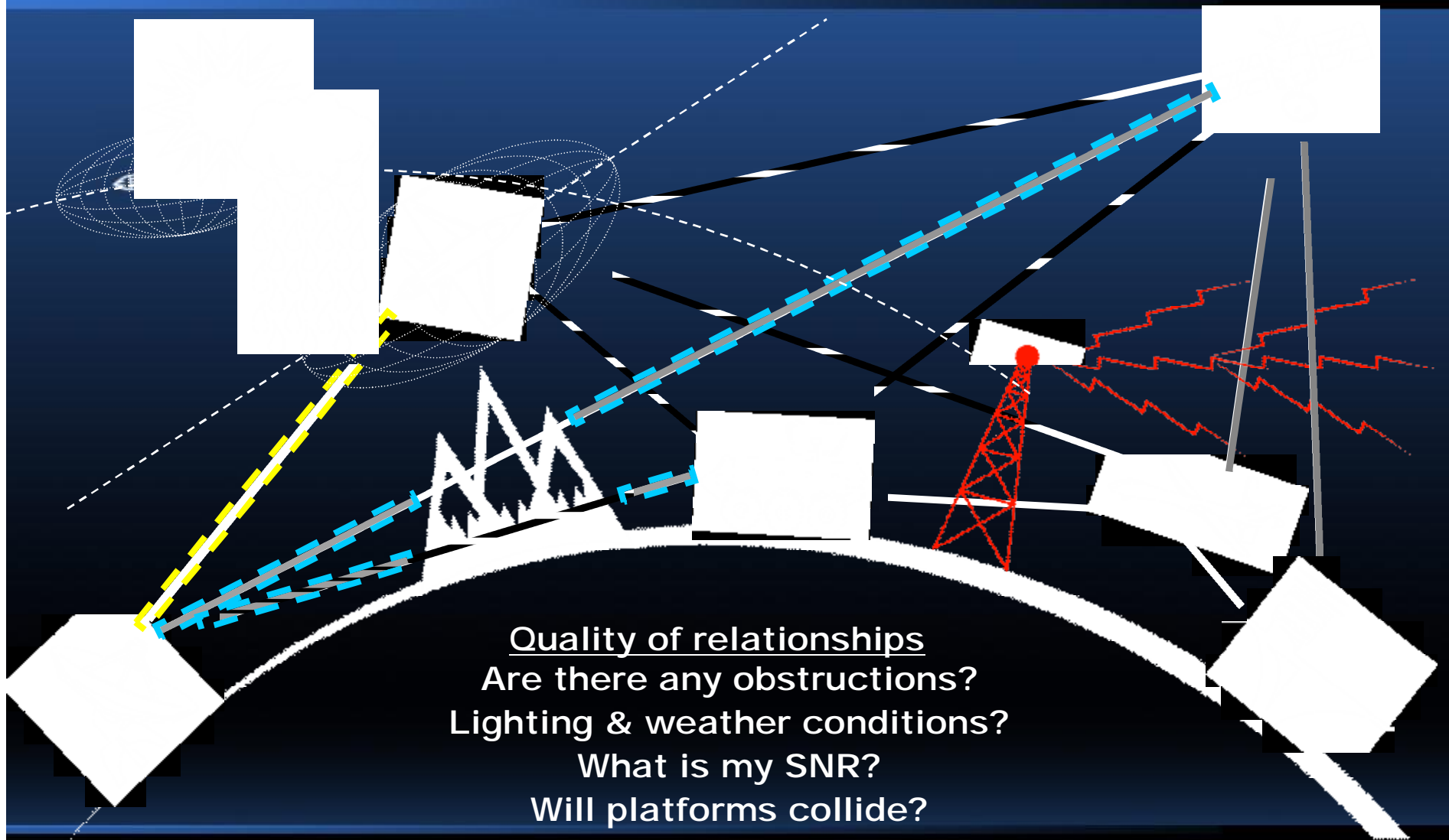
Relationships among objects and areas

Who can I "see"?

Who can "see" me?

Can we all "see" each other?

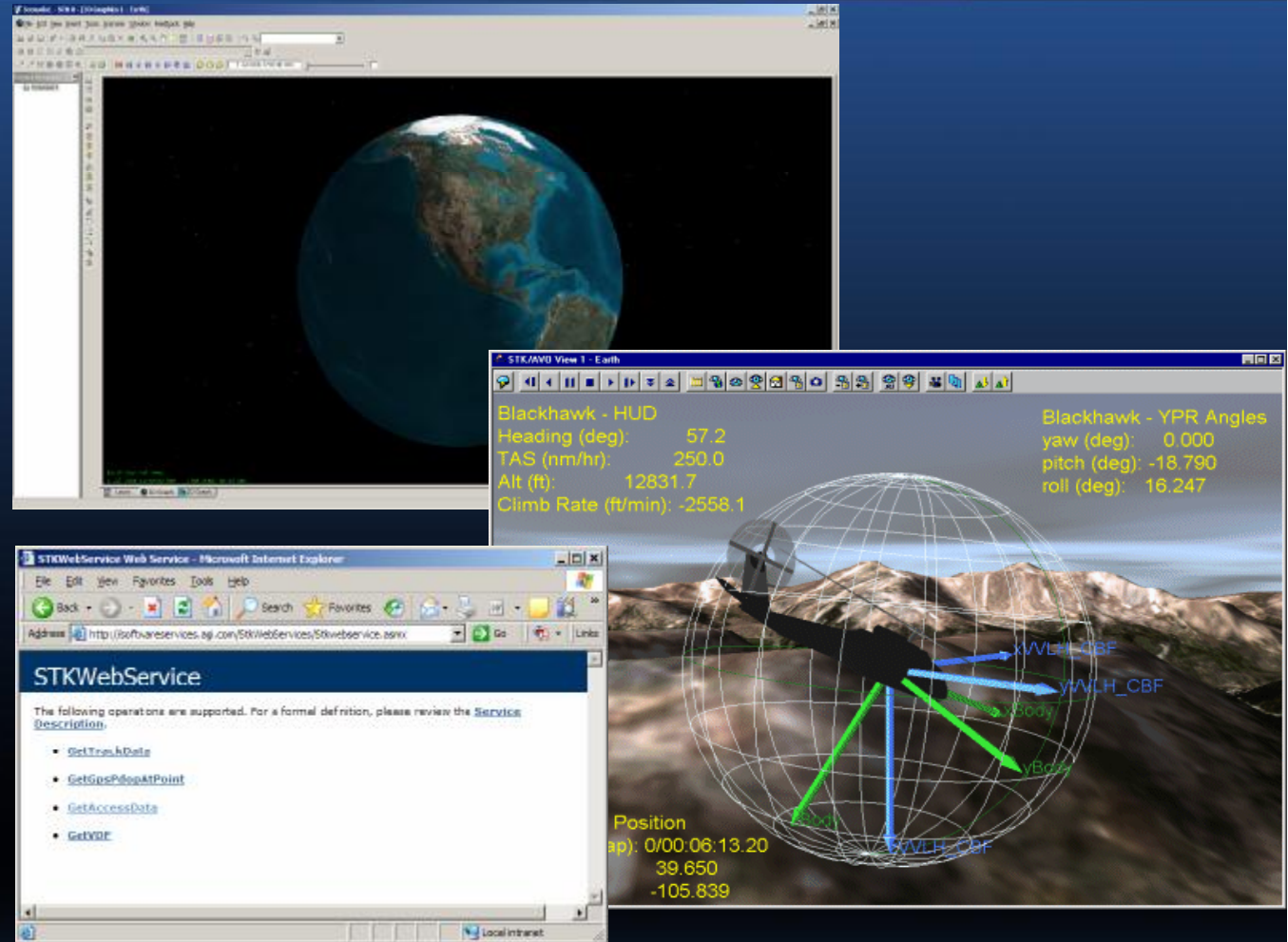
AGI basics



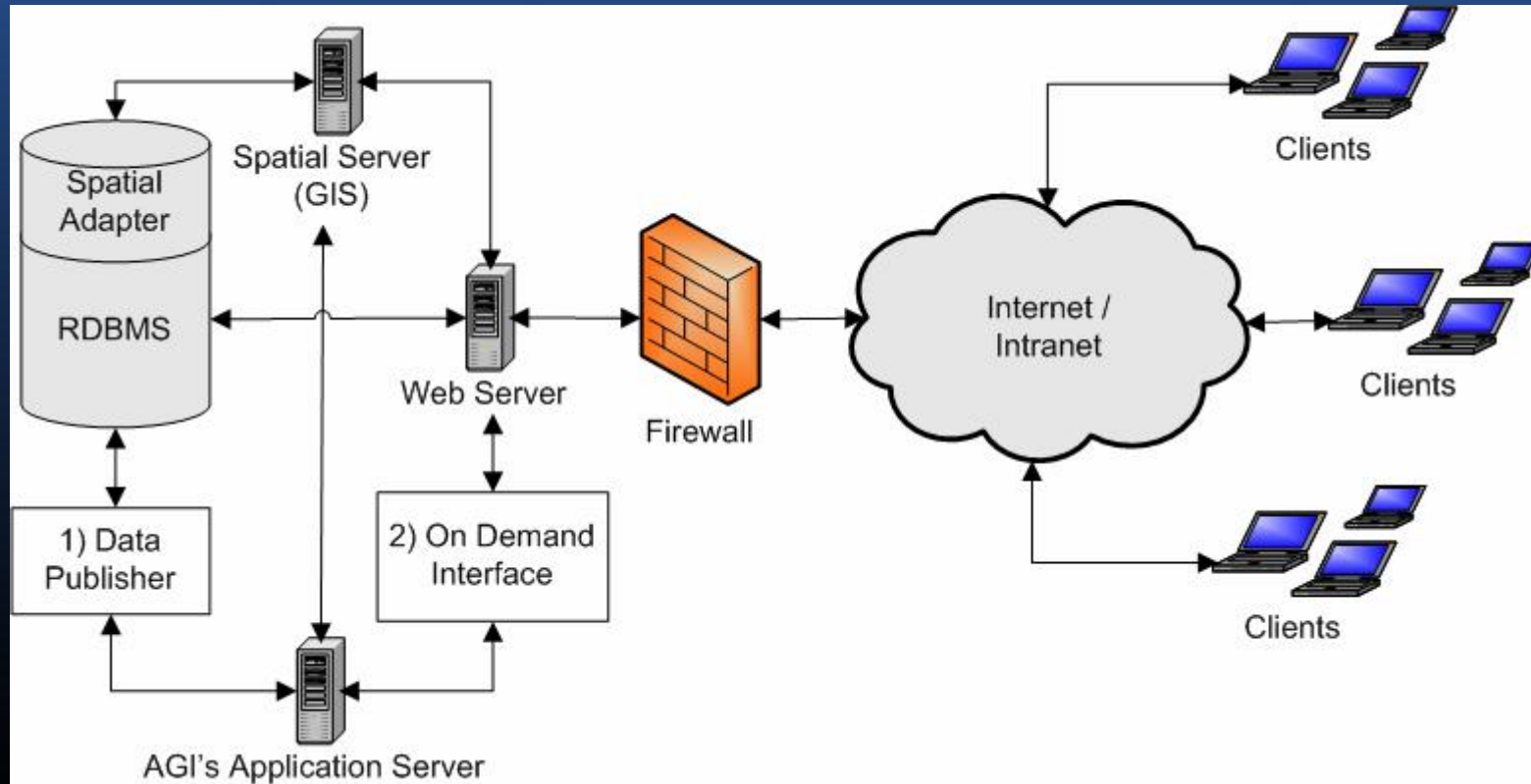
Quality of relationships
Are there any obstructions?
Lighting & weather conditions?
What is my SNR?
Will platforms collide?

AGI Technology Modes

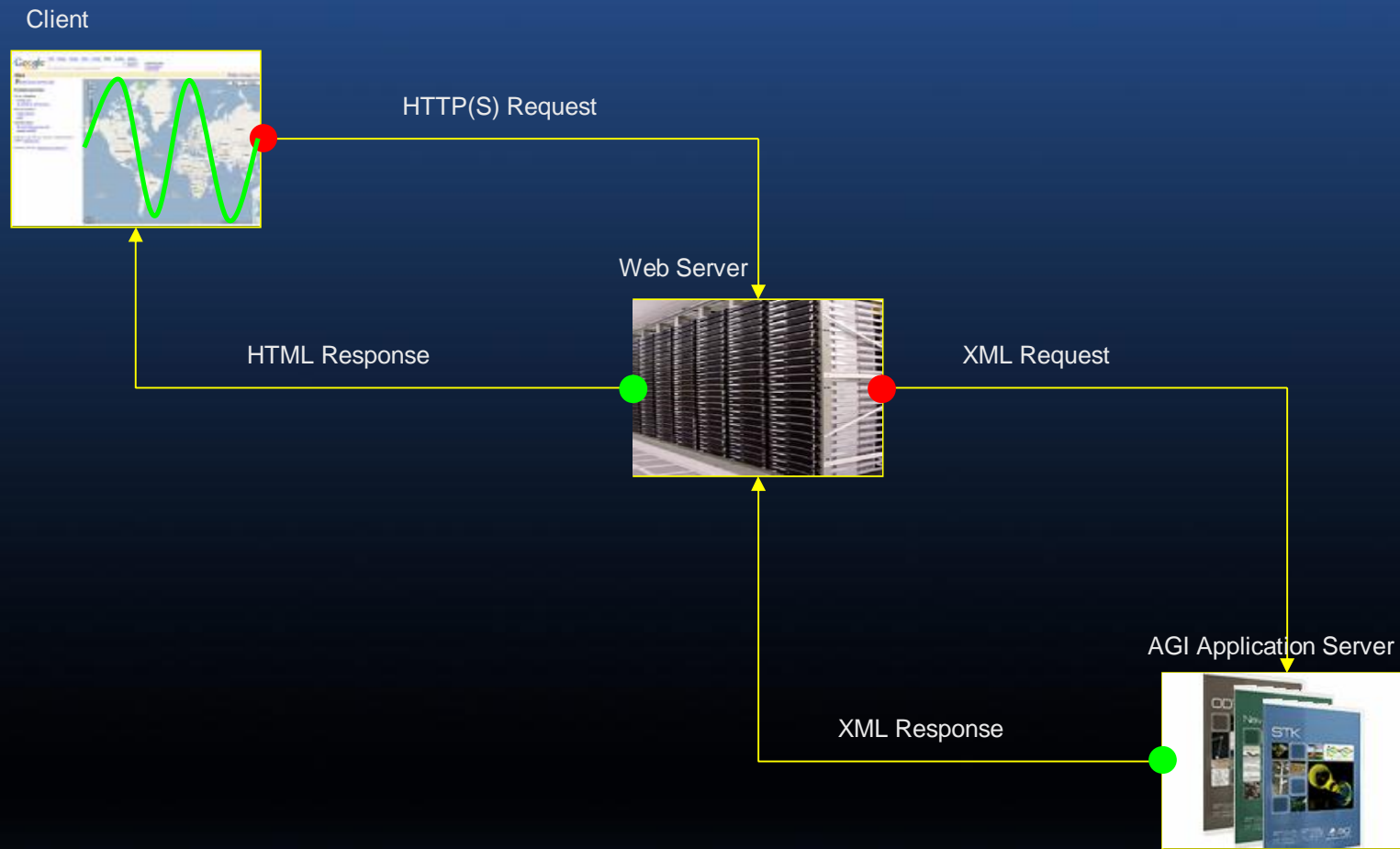
- Desktop
- Integrated
- Server



Example AGI SOA



Sample Web Service



Real world implementation

- Robert Marsters – GeoDecisions
- FEMA / IRRIS Demo

Questions?



- Contact Info

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