

# Real time GPS Networks (RTN) and their Implications with Geographic Information Systems (GIS)



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# Agenda

RTN Overview  
Technology  
What's Next

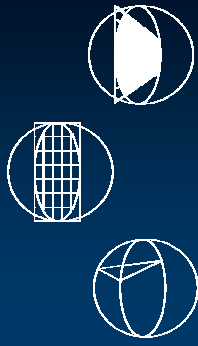
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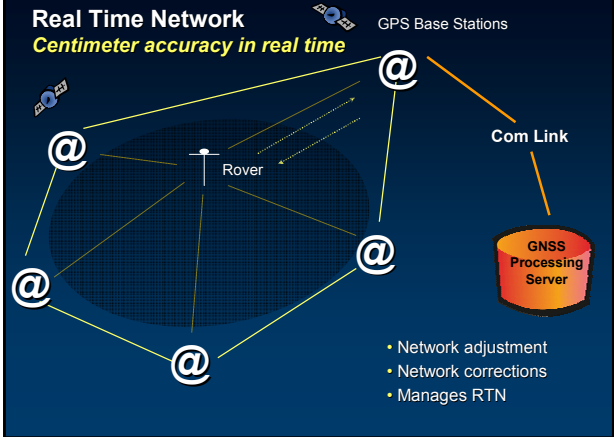
## RTN Real time networks

- Mature technology
- Parallels cellular market
- Growing implementations
- Future of precision GNSS
- Communications protocols mature



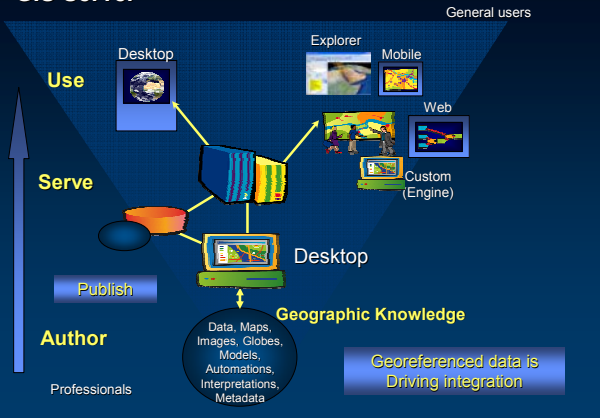
Putting the pieces together

## Real Time Network Centimeter accuracy in real time



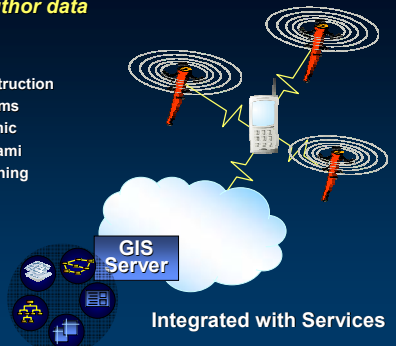
- Network adjustment
- Network corrections
- Manages RTN

## GIS Server



## Server GIS Managing a Network of Sensors Many ways to author data

- Traffic
- Weather
- Monitors
- Satellites
- Aircraft
- Gravity
- Geophysical
- Census
- Demographic
- Business
- Infrastructure
- Surveying
- Real time Network



Survey provides consistent framework

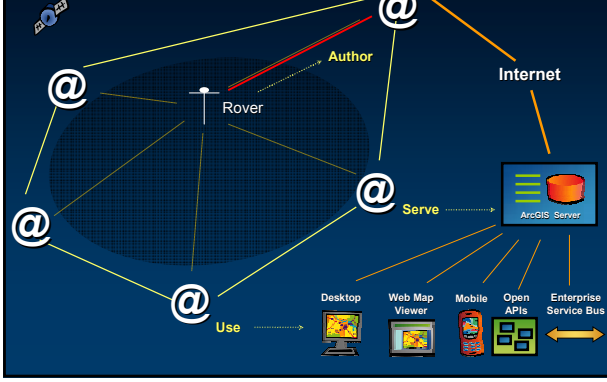
## Server GIS Managing a Network of Sensors

*Many ways to author, analyze, and visualize data*



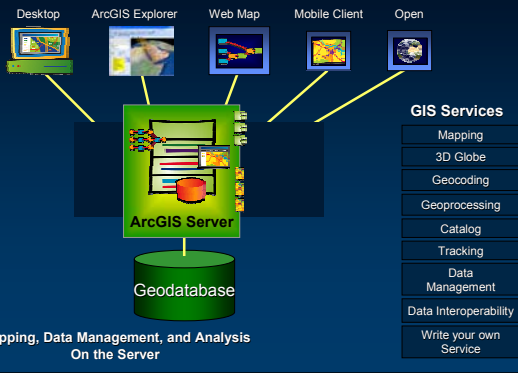
## Real Time Network

*ArcGIS Server Manages Survey Data*



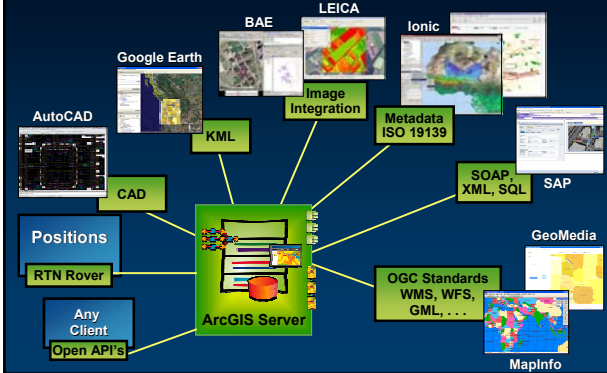
## Server GIS

*Deploying GIS*



## Open & Interoperable

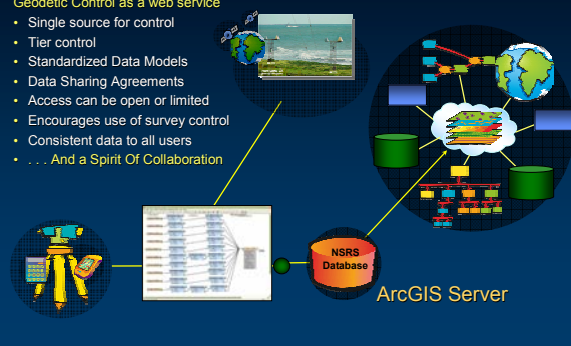
*Serving data to many clients*



## National Geodetic Survey Control Initiative

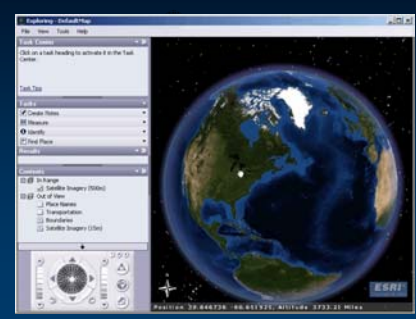
### National Spatial Reference System, NSRS

- Geodetic Control as a web service
- Single source for control
- Tier control
- Standardized Data Models
- Data Sharing Agreements
- Access can be open or limited
- Encourages use of survey control
- Consistent data to all users
- ... And a Spirit Of Collaboration

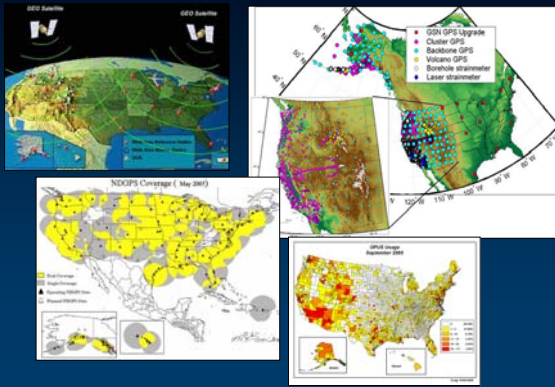


## National Geodetic Survey Control Initiative

### National Spatial Reference System, NSRS

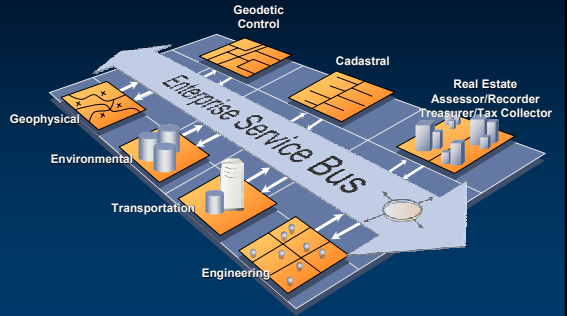


## Geodetic Network Modeling and Dissemination



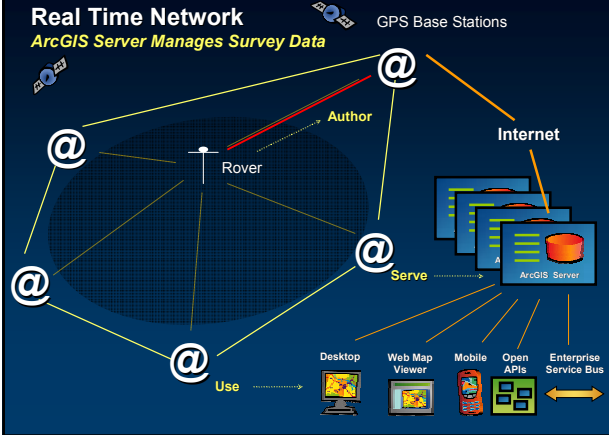
## Multiple GIS Servers

*Author, Publish, Use (but don't edit)*



## Real Time Network

*ArcGIS Server Manages Survey Data*



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Thanks!

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