

# AlertSim - Veljko & Darko

- Expect many alerts (10k/visit)
- Simulator necessary for validating & testing brokers...
- Handling and transmitting to the rest of community
- VO Event Based (for now)
- XML schema
- Sensitive...
- Method of emitting
- TCP/IP – not efficient
- Required at the moment in standards - acceptable for small no. events problem with huge...
- Multicast – tested potentially better solution – emitter does not care who or what receives – many receivers possible (using udp)
- Low level access via socket
- Ideal for testing

# AlertSim

- Integration with the current sims
- Calling opsim3\_61DB to get pointings and times (previous version with blitz/MAF -sqlite)
- Calling catsim to get variable stars (magnitudes – Variability class Scott's help)!
- Declare that data as an alert (event)
- Pack data to VOEvent schema
- Transmit to the rest of the world (mcast)
- Receiver takes xml events and parses them
- Now broker/CEP engine can manipulate everything

# AlertSim

- Problems (to do!)
- DB does not have ucd's – relative simple – dictionaries – maybe to think to add VO ucd's to DB metadata
- Proxy problems – local network at the moment (lacking machines with open ports – 5032-5035)
- Retransmitting packets – easy
- Opsim generates double outputs probably exposures but same mjd??
- Different types of variability – up to sims community
- Documentation? Package integrity (with very short delays)
- Integrating with the rest of sims – probably after switch to github

# AlertSim

- JSON (easy integrating to web services)
- Esper (CEP engine)
- Socket gives easy access to tcp/ip transmission as well
- Polishing VOevent data - adding different functionality
- Licenses – we are using VOEventLib – was available till recently status??
- Phosim for generating cutouts (hack6??)
- galaxies+SN at some point
- Defining how to transmit cutouts – base64 encoding??
- Demonstration!
- Unrealistic....