Architectural Considerations

1. Handling over 1M users

The following tasks will be done to ensure that we can have a very TPS to support over 1 million users:

1. http sessions for the webservices – This maximum probable number of http sessions will be set to 400 ,this guarantees that 1 single instance of the webservice deployed can give up to 400 transactions per second.If the service is deployed in a multi site environment with at least 4 Tibco BusinessWorks servers in each site,we can get at least 6400 TPS which can comfortably handle 1M users
2. Concurrency – The APIs will be deployed across 2 sites each with 4 BusinessWorks servers properly sized.The deployment will be active-active and the services will be accessed using a global load balancer IP which will be routing traffic to all services via a round robin algorithm.
3. High I/O – Tibco Administrator allows throttling on the web services to ensure that the web services do not consume more load than they can process.The following configurations will be done:
4. Flow Limit – this will ensure that only a maximum number of jobs are kept in memory at a time
5. Enable memory saving mode – This ensures that any shared variables on memory are deallocated as long as the variable has no value
6. Activation Limit -