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An object oriented model for IPv4/IPv5 network management

COS 236 essay submitted by
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4 Opinion on Advantages and Disadvantages

The hierarchical and distributed architectures when utilized, avert single point of failure of the management center, which means management center is available most of the time if not always. Availability is not the only quality requirements the model offers. IPv4/IPv6 network management can utilize hierarchical management to improve reliability, employing distributed management to obtain scalability and use object-oriented modeling to enhance flexibility.

Twisted is an event-based and asynchronous network communication framework which allows programs to keep response when handling events without using threads, as thread require mechanisms to inorder to process resources, thread may return invalid and inconstant responses if not properly implemented. Twisted also avoids single point failure and overcomes the network bottleneck of C/S model.

For centralized architectures maintenance is simple, one person or a team looks after all of the knowledge stored in a single file or database , but the model uses a distributed architectures and maintenance is more difficult. Since the model is Object-Oriented database based and OODB's are not mature nor extensively tested, vast amounts of data is in relational format already and lastly programmers know how to optimize for high-speed retrieval of such data. Finally the use of threads would have made the system faster through concurrency

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