

## ABSTRACT

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### **Installation and Configuration of Internet Protocol Telephony System Using Cisco CallManager Express 4.0**

(xi + 67 pages: 22 figures; 5 tables; 3 appendices)

Internet Protocol (IP) telephony has emerged and replaced the conventional phone. The IP-Based Phone does not need monthly payment. If large corporations rely solely on traditional PBX (Private Branch Exchange), the monthly fee of phone charges accumulated over one year will be greater than using IP Telephony technology. The reasons are expensive cost of calling overseas company branches, cost of cables used, recovery cost in case of noise signal transmission.

The field work at PT.Multipolar Corporation Tbk. gave valuable experiences in installing IP Phones, configuring IP Phones and setting up phone features using Cisco Catalyst, and IP Phones. Firstly, administrator must analyze client's network condition and propose types of IP Phones, router, and catalyst to implement in the network topology. Secondly, administrator should design the block system diagram. There are prerequisites and restrictions that administrator should fulfill to install Cisco CallManager Express 4.0. Lastly, after fulfilling the requirements, administrator can configure the Cisco CME Phones either by terminal or web.

The result is IP telephony network developed already fulfills client's requirement. However, the features configured on the IP Phones are portions of the whole features that can be added until IP Phone functionality is optimal. If scalability increases, then internetwork between CCME and CME should also be configured to improve network's future compatibility.

Reference: 10 (2003-2007)