

FIW Panel on New Features

Will VOIP Cause the Next Evolution of
Features?

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Circuit Based Switching

- Features are the rearrangement of connections in a call, and the set up of the data associated
- Circuit switched systems rigidly manage the control over connections and the associated data, for example:
 - Hook-flashing
 - Sending a message
 - Busy/no answer/always call forwarding
 - Screening lists
 - etc.

Packet Based Switching

- Moves the control of connections out to the end points
- Gives the end point the ability to change connections based on any number of policies that they define
- Enables organizations to manage a 'virtual enterprise' not controlled by many networked switches
- A 'virtual enterprise' application can
 - manage connections without restriction
 - contain the knowledge for which end points need to be connected and tell the network to set the connections up accordingly
- This relegates the network to a very passive role

What Does This Mean to the Evolution of Features?

- ‘Standard’ features will still remain, for example:
 - Call forwarding: the rules and policies governing it will not be restricted, the rules for when, if and to what person it takes place can be virtually endless
 - Call screening: can now be handled by more than a simple list
- When a call arrives at a virtual enterprise, the system decides what will happen to that call, how many users will be involved, and simply tells the network what connections to set up or change accordingly

Call Control – What Does it Really Mean?

- ‘Call’ really encompasses all media streams
- ‘Control’ is the managing of predictable behavior of a system
- Call Control needs to be an all-encompassing application which can take into account state/event/policy and give a predictable outcome in line with the enterprise/user’s desires independently of the type of device

What does VOIP Do to Call Control and Features?

- Even with a standardized method of handling connections, feature interactions are a very complex problem
- When connection management is decentralized, the problem becomes many times more complex
- When managing features that affect an enterprise or group, with policies introduced by many different layers of an organization, the need for 'centralizing' some of the functionality and maintaining control is necessary

Conclusion

- VOIP allows for features to be taken out of the middle of the network and pushed towards the periphery
- This creates a tension between the flexibility of end users to control their own sessions, and the need of the enterprise to organize their work
- There still needs to be an application which maintains control over the policies governing connections and helps to manage the feature interactions