What type of firewall would you suggest if you were the Chief Security Officer of a Fortune 500 company (packet filtering, application gateway, circuit gateway, MAC layer, or hybrid) and why?

FIREWALLS

Packet filtering is a firewall technique used to control network access by monitoring outgoing and incoming packets and either allowing them to pass or halt based on the source and destination, IP addresses, protocols, and ports. <https://www.techopedia.com/definition/4038/packet-filtering>

Application gateway or application proxy or application-level proxy is an application program that runs on a firewall system between two networks. Client attempting to connect to a destination service first connects to a proxy server. Then, if authentic the proxy server connects to the destination server and returns the requested data. <http://www.webopedia.com/TERM/A/application_gateway.html>

Circuit level gateways are firewalls that when a client machine sends a web request to a destination machine the destination machine retrieves and returns the data, but hits the firewall. The firewall then checks to see if the IP address and the port match up, then the data is either allowed or dropped. <http://www.pcstats.com/articleview.cfm?articleid=1450&page=5>

MAC layer allows you to filter devices by their MAC address. Basically, you’ve stated the device should be allowed to communicate it will. If a device that is not setup to communicate within the network tries to, it will be blocked.

Hybrid firewalls consist of the implementation of two or more firewalls.

FIREWALL OF CHOICE

I would choose to implement a hybrid firewall. I believe multiple points of protection are needed in today’s rapidly growing Information Technology business sector because, of the elevated sophistication and quantity of attacks, threats to information security.