shadytel midwest

VCFMW 21
TELEPRESENCE SYSTEM

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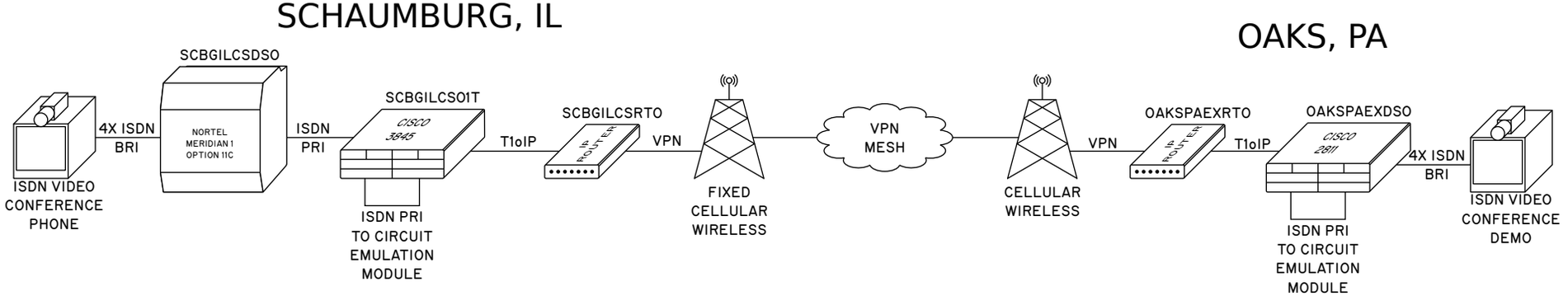

THE SHADYTEL TELEPRESENCE SYSTEM IS A DEMONSTRATION OF 90s AND EARLY 2000s ISDN VIDEO CONFERENCING TECHNOLOGY. AN ISDN VIDEO CONFERENCING UNIT AT EACH END IS CONNECTED TO THE VCFMW/RETROCON COMBINED TELEPHONE NETWORK.

IN ORDER TO TRANSPORT THIS TRAFFIC FROM VCFMW TO RETROCON, THE SCHAUMBURG VIDEO CONFERENCING UNIT IS CONNECTED TO A NORTEL MERIDIAN 1 PBX USING 4 ISDN BRI LINES WITH AN AGGREGATE BANDWIDTH OF 512kbps. THE 8 SIMULTANEOUS DATA CALLS ARE CARRIED FROM THE MERIDIAN PBX OVER AN ISDN PRI LINK TO A CISCO ISR ACTING AS A TANDEM SWITCH. THE CALLS ARE SWITCHED TO ANOTHER ISDN PRI LINK WHICH IS CONNECTED TO A CIRCUIT EMULATION MODULE CAPABLE OF CARRYING AN ISDN PRI/T1 OVER INTERNET PROTOCOL (IP). THIS T1oIP TRAFFIC IS ENCAPSULATED AND CARRIED FROM SCHAUMBURG TO OAKS OVER A VIRTUAL PRIVATE NETWORK (VPN) MESH ON TOP OF THE INTERNET (A DISTANCE OF OVER 600 MILES).

AT THE OAKS END, THE DATA IS SUCCESSIVELY DE-ENCAPSULATED BY A VPN ROUTER AND A CISCO ISR BEFORE THE CALLS ARE FINALLY SWITCHED TO THE VIDEO CONFERENCE UNIT OVER 4 ISDN BRI LINES.