

VNCs, Web Portals, Biometrics and the Verification of Distance Education Students

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Technologies exist which allow Higher Education Institutions to extend their classrooms beyond the traditional lecture hall to virtual learning environments. Technologies such as Virtual Network Connections (VNCs), and Web Portals (WebCT Vista & CE) are useful tools in the transfer of knowledge to distance students. However, these technologies offer weak methods of student verification - passwords. To improve the confidence of Universities, Instructors, and other Students that the proper distance students are answering exams, quizzes, assignments, and lab practicals, biometric technologies (i.e. face, fingerprint, iris, keystroke dynamics) can be employed. Biometric technologies automatically recognize individuals based upon behavioral or biological characteristics. As such, biometrics can add an additional layer of security or confidence to weaker verification methods i.e. passwords. Frameworks for integrating biometric technologies into existing University educational tools are detailed: a VNC network with biometrics is shown in Figure 1 and a Web Portal connection with biometric verification is shown in Figure 2.

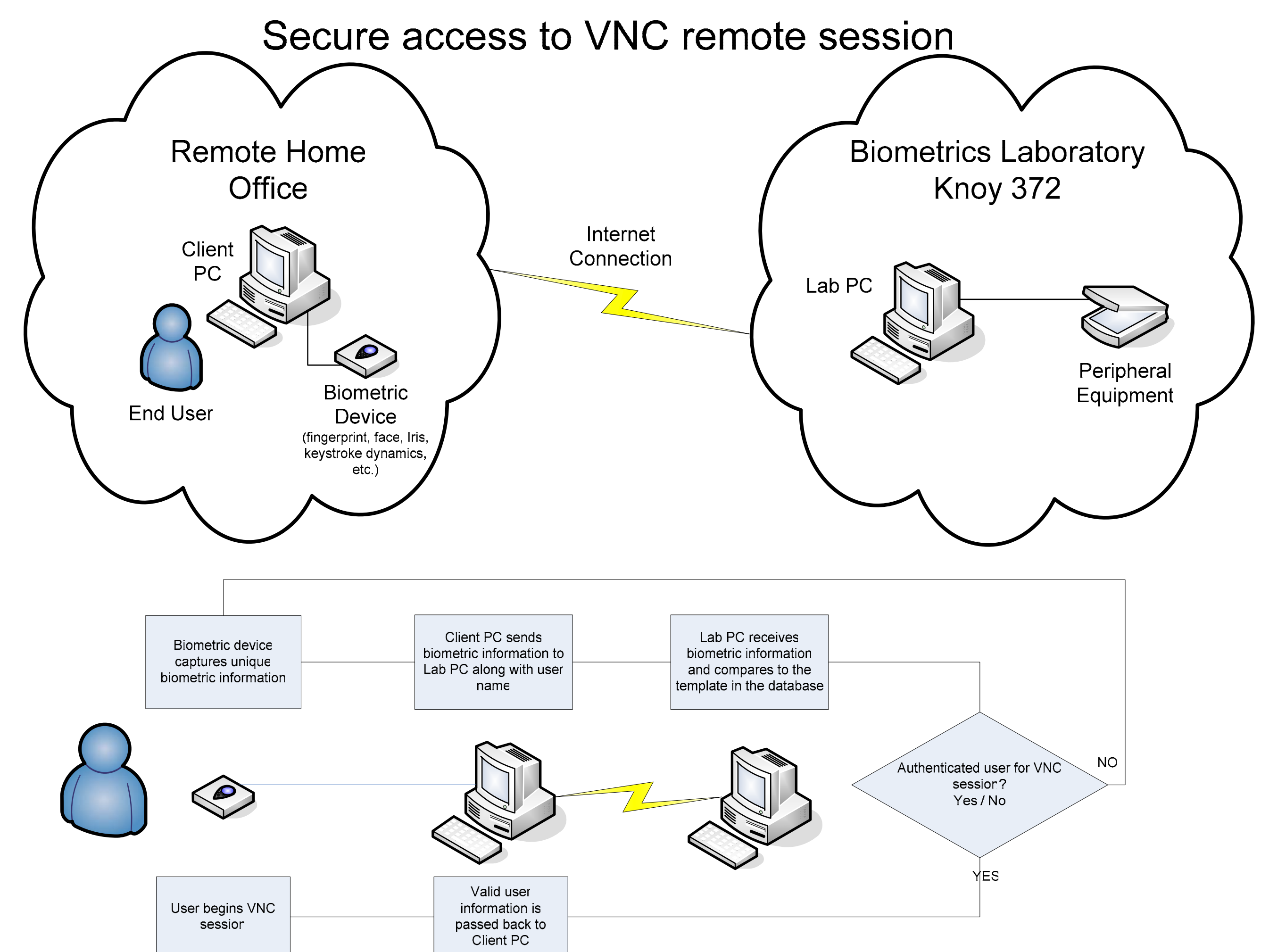


Figure 1: VNC Network Connection Schema

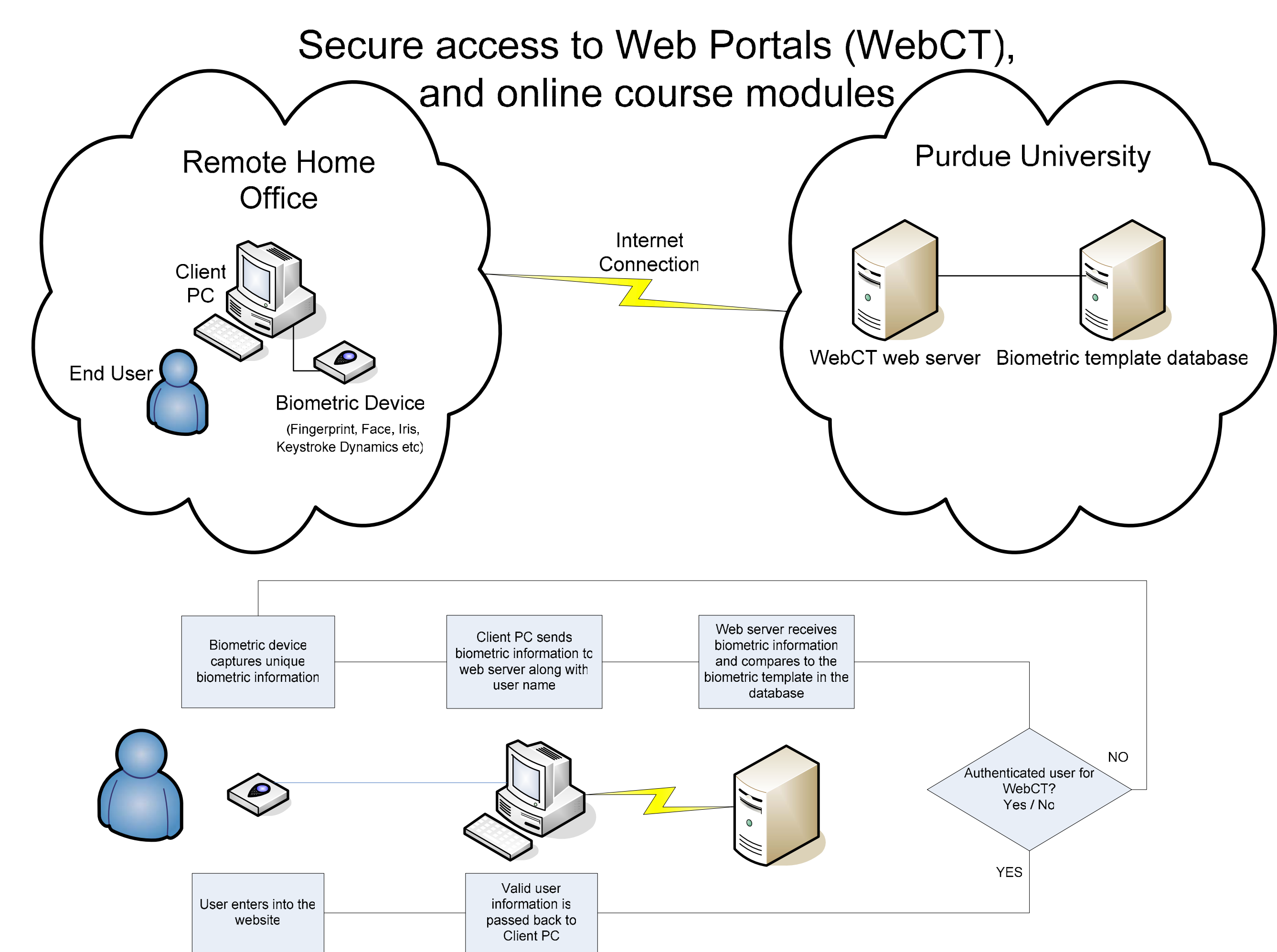


Figure 2: Web Portal Network Connection Schema