Cloud Computing Services (CSS)

Condortech did an extensive research and investment for the preparation of its Cloud Computing Services (CCS) for its Access Control, Biometrics, CCTV, IDS and other security applications. Based on experience, within our own Information Infrastructure Services, with the use VMware and Citrix; we delivered great technical results. Few of our customer in the private industry are greatly benefiting from these technologies, with the use of our CCS preferred methods. Our research shows that most government and schools are already implementing their Cloud infrastructure with the use of these OS. Cloud Computing implementation are becoming a big challenge for the security industry, especially with manufacturers that have their security applications; not fully tested or not compatible to work within the VMware or Citrix environment. CTS agree that with the development of Private and Public Cloud services, it will help our industry to create an interoperable environment; which will also help in meeting certain goals of the CIO (server reduction and energy reduction, etc.). The purpose of Condortech's Cloud Computing Services is to offers unified and centralized management for the Security Services we offer; thus keeping the cost of IT expenses low. Our Security Services in the Cloud may be composed of CCTV, Access Control, Emergency Response and Intrusion Detection systems. And they can be tailored to the need of the Federal Agency or Private Industry.

Another advantage in using CSS is with the use of Terminals that are low in cost; rather than use of PC Computers. Since all IT and Security Services are centralized, the potential to have internal intrusion is mitigated as well; including the management and support of many computers.

Cyber Security and Logical Security are also centralized and simplified with the use of our CSS. And in order to mitigate logical and cyber security threats, CTS believes that a combination of good policies and procedures and proven of the shelve cyber security products are the foundation for a secure CSS. In other words, Cloud computing is a centralized information system with less servers thus reducing power, energy, space thereby simplifying policies and procedures.

Cloud computing unlike the old Mainframes or Mini Computers processed data from one central point, were they demanded more hardware, energy and real estate space; unlike the new super computers of the 21st Century are more capable. The use of high speed computers, with server providing "High Availability" with "99,999% uptime" and Fault tolerant are key for the entire success of our CSS services. These systems of systems are the main components of a well planned CSS service, in order to provide Software as a Service (SaaS) to be delivered by demand and to multiple locations.

Disaster Recovery.- CTS will assist its customers with a well written Disaster Recovery Plan (DRP), especially in these days of unplanned natural disasters that may come to a facility or facilities that holds the Cloud infrastructure. CTS believe that every component of the security

system should plan to have an IT disaster recovery. In broad terms, this is how you deal with and prevent your CCTV or Access Control downtime. Even if every other part of your business continuity plan is executed perfectly, you remain at a standstill if your security systems go down and stay down. The CSS services will greatly mitigate this potential problem and will provide High Availability of secure services at all times. Remember, Disaster Recovery Isn't the same As Disaster Prevention, there's a huge difference between disaster prevention and disaster recovery.

Directives and Mandates.- CTS will provide its customers services that meets the goals of new Directives-Mandates and Technology, centered with attention given on the impact to the culture of the security programs; and end users security requirements. In order to meet the requirement of our customers, CTS will integrate proven sensor technology; who have a strong hardware and software support on the Cloud Computing along with the different Electronic Security Sensors.

Political Considerations. Sometimes, the decision can be short-circuited by resistance from within an organization, if important people insist that certain functionality remain internal, under the control of IT or Physical Security; other considerations therefore become unimportant. Test-drive deployments (see the previous subsection titled "Managing the Risks of Software Acquisition") might sometimes help convince risk-averse managers to approve pilot projects.

Our Technology Partner Stratus Technologies: Stratus Technologies is a global solutions provider focused exclusively on helping customers achieve and sustain the availability of information systems that support the availability of information systems that support their critical business processes. Based on more than 27 years of expertise in server and services technology for continuous availability, Stratus is a trusted solutions provider to customers in government commercial sector.

Stratus Technologies Inc. provides system solutions for business processes and applications. Its solutions include operating systems; fault tolerant servers; and Stratus Avance software that enable to transform servers into an availability virtualization platform. The company provides virtualization, business continuity, change management, information technology infrastructure, performance management, recovery, and security management, as well as offers site planning, installation, and support services. Apart from IBM and HP, Stratus has been in the business even prior to DELL.

Stratus Technologies Inc. announced its new Stratus(R) Avance(R) software 2.0 for small to mid-size businesses, expanding the product's arsenal of defenses against downtime and data loss. Avance software for high availability overcomes concerns about tight budgets and finite technical skills to deliver enterprise-class uptime to SMBs. Avance software 2.0 is designed to configure and manage its own operation. It automatically performs hardware and host-level software monitoring, fault detection and resolution of more than 150 critical operating conditions. The new graphical system management dashboard presents comprehensive

configuration and active alert information with multi-lingual online issue-resolution guidance. System managers access the dashboard, as well as platform hardware and software resources, via a Web interface permitting platform management from anywhere. In an Avance configuration, Windows and Linux applications run on one x86 server in virtual machines, while data is automatically and synchronously replicated to a second server in real time. Shared storage is not required. Avance software 2.0 includes new virtual-machine provisioning features (import/export, back-up/restore) that make it easy to integrate into existing IT infrastructures. In addition to preventing unplanned downtime and data loss, Avance software minimizes planned downtime for hardware and software maintenance minimizing disruption to client applications and services. The new version also features expanded RAID options for storage and management of uninterruptable power supplies. Avance 2.0 software is available from Stratus' growing roster of global channel partners, including a range of horizontal and vertical systems integrators, value-added resellers and independent software vendors. A key market for Stratus Avance software is healthcare, specifically physician practices, outpatient clinics, small hospitals and clinical laboratories.

VMware, the global leader in cloud infrastructure, delivers customer-proven virtualization solutions that significantly reduce IT complexity. VMware accelerates an organization's transition to cloud computing, while preserving existing IT investments and enabling more efficient, agile service delivery without compromising control. Organizations rely on VMware, its partners and its industry-leading virtual infrastructure platform, VMware vSphere, to energize their business through IT, while saving energy—financial, human and the Earth's. VMware vSphere, the industry's first cloud operating system offers tremendous benefits to enterprises and public agencies that typically operate multiple server systems at fairly low utilization rates. vSphere enables organizations to consolidate servers and storage, resulting in reduced IT hardware and maintenance costs, reduced energy costs, improved operational flexibility and potentially reduced real estate costs. Dynamic load balancing and live workload migration capabilities help optimize resource utilization while eliminating the need for over-engineering on a per-application basis in order to ensure ample capacity for peak activity periods.

Technical Considerations. SaaS applications typically provide some flexibility for customer configuration, but this approach has its limitations. If an important application requires specialized technical knowledge to operate and support, or requires customization that a SaaS integrator or vendor cannot offer, it might not be possible to pursue a SaaS solution for the application. In the case of our security PACS applications, the selected PACS Software to be recommended by CTS will be solid and there will not be a need to customize anything, all the CTS sensors and security applications are off the shelf with proven technology in other Cloud and non Cloud environments.

Another factor to consider is the type and amount of data that will be transmitted to and from the application on a regular basis, in our Condortech Solution we have configured the Servers with the necessary storage space and the data to be transmitted in minimum based on the amount of card readers and micro-controllers. Internet bandwidth pales in comparison to the

gigabit Ethernet links commonly found in enterprise LANs, and data transmissions that take a few minutes to transfer between servers in your server room or command and control center (C3) might take hours to transmit to and from a SaaS application located across the country. An appliance-based solution, for example, might cache or batch. We also have to consider that the critical data gathered from the microcontrollers from the readers are captured first in its own microcontroller resident memory, which CTS will configure to deliver and retain data at the best possible rate and speed. This is why we selected the most advanced Controller as Appliance which can deliver high volumes of processing speeds over the competition. In essence these controllers serve as a double redundancy for capturing data and making the process of data to activate a door or a door contact. Our controllers use a V2 ColdFire core delivering 76 (Dhrystone 2.1) MIPS at 80 MHz running from Cache/RAM (max running from internal Flash 66 MIPS) and it communicates to the Cloud via an encrypted AES TCP/IP protocol.

The following drawing is a layout diagram for a Security System on a Private Cloud: