Custom Software Solutions

For over 40 years, we have worked closely with our clients to design and integrate Linux® and Windows® computer system solutions, delivering unsurpassed products and services.

We work closely with our clients to design computer system solutions and implement them.

We frequently provide engineering to:

› Analyze legacy software and provide a bid specification for a replacement system
› Program software and install systems to client specification on a turnkey basis
› Support a client project team through the development and implementation stages

While CTI software engineers have special knowledge and experience related to tire manufacturing, they have also assisted a variety of clients in the automotive, retail, steel, pharmaceutical, eCommerce, and package delivery industries.

Our clients come from diverse industries, but their projects typically share a common goal: satisfy special business requirements with software not found in a box.

i Commercial Timesharing Inc. (CTI) provides innovative software and electrical engineering services worldwide. Founded in 1978, CTI has grown to 20+ engineers, part of a total enterprise of more than 100. CTI is a valuable resource for large industries.

Expertise in :

› Data Acquisition
› Measurement Algorithms
› Factory Automation
› System Integration
› Inventory Management
› Statistical Process Control
› Business Intelligence
› Re-engineering
› Barcode Management
› Intranet & Internet Applications
› Specification & Design
› Network Security
› Database design & Implementation
› Documentation & Online Help

Programming Environments :

› Linux
› Windows
› PHP
› Python
› C / C++ / C#
› .NET and .NET Compact Framework
› Visual Basic
› Oracle Database
› SQL Server Database
› OLTP / OLAP Reporting Services
› TCIP/IP
› Serial Communications

Controls Engineering

CTI projects have ranged from PLC control of a mobile shipping container transfer station to a fully integrated control system that conveys products throughout an entire factory based on product, scheduling, and machine availability.

How CTI approaches Solutions for PLC and Integrated Control Systems:

We Evaluate

The extensive experience we have with factory processes and machinery allows us to quickly understand client needs in the areas of process and machine controls.

We Integrate

We understand the "big picture" and integrate machine and material handling information directly into the factory and corporate data centers. We take pride in providing clients with completely integrated solutions for process monitoring and control problems.

We Innovate

When "off-the-shelf" software can't be found, we develop it. A good example is PLCIO, a Linux/Unix interface that works effectively with multiple PLC brands and models. PLCIO has proven itself over the years and continues to be extremely popular for those who need to port existing Allen-Bradley INTERCHANGE applications to modern platforms.

> **i** We've created our own Linux/UNIX to PLC API library; PLCIO was born from the need to provide a simple but effective communications interface to talk to I/O devices. Our primary objective was to abstract the application and communications layers so that someone programming the business and database logic would not have to worry about the communication details.

Expertise in :

› PLC Programing
› Distributed Control
› Multi-axis Motion Control
› Process Monitoring / Alarming
› Human / Machine Interfaces
› SCADA Applications
› Electrical / Mechanical Engineering
› Material Handling Systems
› Data acquisition / Signal Processing
› Customized Testing and Laser Measurement Algorithms

Programming Environments :

› Rockwell / Allen-Bradley
› Modicon
› Siemens
› Beckhoff / TwinCAT
› WAGO
› IEC 61131-3