CUSTOM INSTRUMENTATION SERVICES CORPORATION



Why Customers Choose CeDAR 7

- CeDAR 7 is a configurable software product what that means is the additions, modifications and deletions can all be made on the fly. In a matter of minutes CiSCO configuration specialists can modify the software to add new reports, change or add calculations, modify screen designs and add or delete I/O points. There is no need for code rewrite and recompilation or complicated installation at the site. A simple download of a new configuration file and a restart of the CeDAR 7 program and the system is off and running.
- CeDAR 7 uses SQL Server as its database so the only limitation on data storage is on the size of
 the hard drive. There is no need to purge old data or limit the size of the database in any way.
 Many units can be stored in the same database. So expansions to existing facilities only require
 a modified configuration file and the data from the new unit is simply added to the existing
 database files.
- CeDAR 7 is designed for easy remote access a remote viewing computer can easily connect to
 the CeDAR 7 software, so the main DAHS Server can reside in a secure location, but the control
 room(s), instrumentation shop, etc. can all have access to the data and view the system from a
 variety of locations throughout the plant. Additionally, a plant can choose to activate the CeDAR
 7 Web package which allows for remote viewing from anywhere, smart phones, tablets, home
 computers, etc. [Note: plant IT groups would need to be involved in the setup of the CeDAR 7
 Web program to ensure secure access only.]
- CeDAR 7 allows remote alarm notification sending text or e-mail messages when certain alarms are activated in the CEMS. The choice of which alarms trigger remote notification is a configurable option. [Note: plant IT groups would need to be involved in the setup of the remote notification system to ensure secure access only.]
- CeDAR 7 runs as a service on the CEMS DAHS Server. That means that the software is collecting
 data regardless of log on status. No user needs to be logged onto the server and the system is
 still collecting and storing data.
- CeDAR 7 allows User logons this allows plant personnel to track who edited data and when the data was edited based on the User logon.
- CeDAR 7 uses a historical data tracking system. That is, CeDAR 7 stores all iterations of the data.
 This allows audits of the system to review data editing and noting the original values and all subsequent data changes.

- CeDAR 7 comes with a predefined set of plant approved reports, but also includes a Report
 Wizard to allow plant personnel to create or modify report templates as they see fit. These
 report templates become part of the system moving forward and do not need to be recreated
 every time the report is needed.
- All reports can be printed or saved in either pdf format or csv (for import to Excel) format.
- CeDAR 7 uses a real-time data collection database that captures data for CEMS Auditing at levels that can reach the one-second data level. Troubleshooting analyzer or process changes using this data allows plant personnel to view incredible amounts of data for analysis.
- Reports for Certification Test Teams (or Auditors) are easily defined and printed in 10-second, minute or hourly formats and can be set to print each data point or summary values only.
- CeDAR 7, in combination with the PLC control system for the CEMS, ensures that no data is lost due to DAHS Server malfunction or communication loss between the individual CEMS PLCs and the DAHS Server. Many types of PLC's store a minimum of seven days of one-minute data (10,080 minutes), as well as the daily calibrations for the last seven days, for automatic retrieval by CeDAR 7 when communication or DAHS functionality is restored. There is no user interaction necessary for data retrieval to occur, but the CeDAR 7 does allow for a user to force the retrieval of data from the PLC at any time on demand. Additionally, if the DAHS Server were not functioning or if the communication link was broken with the CEMS PLC, the CEMS PLC maintains control of the system so no functional failure of the CEMS would occur due to this break in communication.
- CeDAR 7 backs up its data to an external source daily. This source can be a plant server or an external hard drive or both (allowing additional peace of mind). If a CeDAR 7 server were to fail, the combination of PLC storage of data for seven days and the external backup files allow for a new CeDAR 7 Server to be operational and have full data recovery in very short order. All CeDAR 7 computers that CiSCO provides are equipped with redundant internal hard drives as a minimum and most use a three-disk array with RAID 5.
- CeDAR 7 has an extremely friendly User Interface. CiSCO designed and wrote CeDAR 7 with the final user in mind. Many of the features built into the CeDAR User Interface were design while working with plant personnel to implement features based on their input.
- CeDAR 7 has a variety of display screens that can be set by the user these include, Giant Numbers, bar graphs and trending screens.
- CeDAR 7 has a very simple and intuitive Reason and Action Code editor that uses colored calendars and pull-down lists to facilitate easy data entry. Reasons and Actions can be free form entered and stored for future use as pull down list items.

- CeDAR 7 can track calibration bottle vendor information, serial numbers and expiration dates. CeDAR 7 alarms at multiple levels when expiration dates are approaching or have passed.
- CeDAR 7 has a built-in alarm log to track all alarms for the CEMS and the DAHS. Printouts of the alarm log can be broken down by type of alarm (CEMS equipment, limit based alarms, general informational alarms, etc.) and by severity of alarm (Informational, Warning, Serious).
- CeDAR 7 can trend historical 1-minute or 1-hour data, real time data and calibration results in
 graphical format. Each 1-minute, 1-hour and real-time trending screen can have up to six
 different parameters, each scaled separately. Multiple trend screens can be active at the same
 time. Calibration trending allows users to view a series of calibration checks to look for a pattern
 of drift or variation. All trends can be printed or saved as pdf files.
- CeDAR 7 has a new calibration editor, allowing the user to view and edit the daily calibrations
 for all applicable regulations in a single extremely friendly user interface. The calibration editor
 will automatically update the pass/fail status of a calibration after edits, allowing the user to
 quickly see the impact of their edits.
- CeDAR 7 automatically back-invalidates data for 40CFR60 calibration fails with no user interaction. This includes rebuilding all applicable downtime parameters automatically.
- CeDAR 7 was created by and is backed by Custom Instrumentation Services Corporation's
 (CiSCO's) in house customer service department. CiSCO prides itself on the best and most
 responsive customer service in the industry. CiSCO does not mandate a service contract to
 answer customer calls responsiveness to customers is our number one goal.