Training Roadmap – Main Stream

EARLY

SCADA Essentials

SCADA & OASyS Intro

OASyS DNA Overview

BEFORE FAT

Component Administration

FAT - SAT

Application Programming

SAT

Display Building

Advanced Display Building

Reporting Services / Report Generation

Operation and Control
<table>
<thead>
<tr>
<th>Course Title</th>
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<th>eLearning</th>
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Contact Information

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Email: Educational.Services-O-G@aveva.com
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SCADA Introduction
AVEVA Enterprise SCADA

Duration
3 Hours

Description
This course introduces SCADA terminology, components and functionality as well as an overview of AVEVA’s OASyS products.

Audience
This course is intended for personnel who require a basic introduction to SCADA and the AVEVA OASYS product.

Prerequisites
None.

Part Number
17000704442 (ILT)
17000704394 (WebEx)
SCADA Introduction
AVEVA Enterprise SCADA

Course Content

1. **SCADA And OASyS Introduction Outline**
   Outline of Course.

2. **SCADA Introduction**
   This module provides an overview of the terminology used and basic functions of SCADA. It also discusses the various components that make up a SCADA system and the features of SCADA.

3. **OASyS Introduction**
   This module introduces AVEVA’s OASyS products. It also discusses the various terminology and acronyms of OASyS, features of our products and the various roles the pieces of our product play.

Outline Updated: 05-Sept-19
OASyS Introduction
AVEVA Enterprise SCADA

**Duration**
3 Hours

**Description**
This course introduces OASyS terminology, components and functionality as well as an overview of AVEVA's OASyS products.

**Audience**
This course is intended for personnel who require a basic introduction to AVEVA OASYS product.

**Prerequisites**
None.

**Part Number**
17000704442 (ILT)
17000704394 (WebEx)
OASyS Introduction
AVEVA Enterprise SCADA

Course Content

1. OASyS Introduction Outline
   Outline of Course.

2. OASyS Introduction
   This module introduces AVEVA’s OASyS products. It also discusses the various terminology and acronyms of OASyS, features of our products and the various roles the pieces of our product play.
**Duration**
3 days

**Description**
This course introduces the core features and functionality of OASyS DNA solutions. The objective is to profile in detail the overall functionality of OASyS DNA product, its middleware components and how they can be leveraged to bring SCADA data into the enterprise.

**Audience**
This course is intended for technical personnel who require an overall understanding of the key features of OASyS DNA solutions.

**Prerequisites**
None.

**Part Number**
17000704456
SCADA Overview
AVEVA Enterprise SCADA

Course Content

1. **OASyS DNA Overview Outline**
   Outline of course.

2. **System Overview**
   This module introduces the components of an OASyS DNA system, an overview of the IT configurations components, as well as a network overview of an OASyS DNA system.

   It also discusses using the NMC for starting, stopping and failing over of OASyS DNA services, hardware components and concepts of data migration.

3. **DistribuSyS Configuration**
   This module discusses the key concepts and inter-system communication strategies for the DistribuSyS model.

4. **ezXOS**
   This module discusses the key concepts of ezXOS and introduces the user interface and graphical features.

5. **ADE (Advanced Database Editor)**
   This module introduces the Advanced Database Editor (ADE) used for configuring the Realtime Database.

6. **Database Configuration**
   This module discusses configuring control privileges for system users and security groups. It also contains configuration of Omnicomm and multiple communication paths. The main section is adding and configuring telemetry data in the RealtimeDB.

7. **eXtended Editor**
   This module provides an overview of the XE Environment as well as how to use common functions in XE.

Outline Updated: 05-Sept-19
SCADA Essentials
AVEVA Enterprise SCADA

Duration
5 days

Description
This course combines essential information about OASyS DNA system overview, operation, maintenance, basic administration, troubleshooting and fundamentals of display development.

Audience
This course is designed for personnel who are new to OASyS DNA, and who will be responsible for basic maintenance of the OASyS DNA SCADA system, RealTime database configuration, and display development.

Prerequisites
Learners should have familiarity with basic computer functionality and terminology. Basic understanding of networks is helpful.

Part Number
17000704450

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## Course Content

1. **OASyS DNA Essentials Outline**  
   Outline of course.

2. **System Overview**  
   This module introduces the components of an OASyS DNA system, an overview of the IT configurations components, as well as a network overview of an OASyS DNA system. It also discusses using the NMC for starting, stopping and failing over of OASyS DNA services, hardware components and concepts of data migration.

3. **ezXOS**  
   This module discusses the key concepts of ezXOS and introduces the user interface and graphical features.

4. **ADE (Advanced Database Editor)**  
   This module introduces the Advanced Database Editor (ADE) used for configuring the Realtime Database.

5. **Database Configuration**  
   This module discusses configuring control privileges for system users and security groups. It also contains configuration of Omnicomm and multiple communication paths. The main section is adding and configuring telemetry data in the RealtimeDB.

6. **Alarm Management**  
   This module discusses the general control room management, new alarm handling capabilities, alarm suppression features and operational features.

7. **DistribuSyS Configuration**  
   This module discusses the key concepts and inter-system communication strategies for the DistribuSyS model.

8. **Trending**  
   This module introduces the concepts of Global Trends and how to create and manage the trends.

9. **eXTended Editor**  
   This module provides an overview of the XE Environment as well as how to use common functions in XE.
SCADA Essentials
AVEVA Enterprise SCADA

Course Content

10. **Controls & Objects**
    This module explains the various controls available to the drawing environment, as well as how to configure and use XE objects for display building.

11. **.NET Controls**
    This module explains the .NET control toolbar section of the XE environment as well as how to configure and use these objects in XE.

12. **Appendix: DNA SWANA**
    This module introduces the functionality of the protocol software analyzer (SWANA).

Outline Updated: 05-Sept-19
Component Administration
AVEVA Enterprise SCADA

Duration
5 days

Description
This course provides information necessary to conduct day-to-day administration of an OASyS DNA installation, with emphasis on system architecture, RealTime and Historical Services.

The course covers in detail about the SCADA security, replication, SCADA service processes and distributed system administration.

Audience
This course is intended for personnel responsible for maintaining the OASyS DNA installation.

Prerequisites
Prior to taking this course, learners should have completed the OASyS DNA Essentials course. Basic knowledge of the Windows operating system is recommended.

Part Number
17000704445
Component Administration
AVEVA Enterprise SCADA

Course Content

1. Component Administration Outline
   Outline of course.

2. OASyS Architecture
   This module examines the OASyS DNA Virtual LAN model, directory structure, NMC, the Administrator Pager and the LogViewer

3. Security
   This module discusses the OASyS DNA security philosophy, Active Directory security, best practices and AD tools, Group Policies and Management Console (GPMC), Permission Security Groups and Users and an introduction to ADAM.

4. Middleware
   This module introduces the middleware components: PubSub; Business Components; SQL Engine.

5. Services Infrastructure
   This module introduces the OASyS DNA service model and OASyS DNA support service processes.

6. RealTime Services
   This module discusses the RealTime Service, Service Administration, RealTimeDB Structure, RealTimeDB Data Access and RealTimeDB backup and recovery options.

7. Historical Service
   This module discusses the Historical Service, Service Administration, Historical Database Structure, Historical Data Access and Historical backup and recovery options.

8. DistribuSyS Administration
   This module discusses DistribuSyS mode changing, job scheduling, Realtime replication and the various types of table distribution.

9. Administrative Tasks
   This module discusses the Engineering Station and utilities, backup strategies, licensing, WMI monitor, Remote Terminal Services and administrative check lists.

10. Appendix: Datapump
    This module examines DPdirect design, configuration and operation as well as the synchronizing tables.
Display Building
AVEVA Enterprise SCADA

Duration
5 days

Description
This course facilitates the OASyS DNA skills and knowledge required for building interactive SCADA displays. It provides the overview of the eXtended Editor and Visual Basic programming with respect to the XE Environment.

The eXtended Editor (XE) is a Windows.NET forms-based Human Machine Interface (HMI) application that provides a What You See Is What You Get (WYSIWYG) environment to Graphical Interface Designers (GIDs) for the construction and editing of displays.

Audience
This course is intended for personnel responsible for development of custom SCADA project displays in an OASyS DNA environment.

Prerequisites
It is recommended that learners first complete OASyS DNA Essentials prior to taking Display Building. Learners should have a basic understanding of programming in a Windows environment.

Part Number
17000704448

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Course Content

1. Display Building Outline
   Outline of course.

2. Graphical User Interface Design
   This module discusses good design principles and techniques of display building.

3. ezXOS Environment
   This module introduces the ezXOS environment, graphics databases and distribution processes.

4. eXtended Editor
   This module provides an overview of the XE Environment as well as how to use common functions in XE.

5. Controls & Objects
   This module explains the various controls available to the drawing environment, as well as how to configure and use XE objects for display building.

6. .NET Controls
   This module explains the .NET control toolbar section of the XE environment as well as how to configure and use these objects in XE.

7. Display Programming
   This module discusses Visual Basic programming with respect to the XE Environment. Deals with VB syntax, object properties, event and methods and other Visual Basic commands.

8. Logic & Loops
   This module discusses the concepts of Visual Basic's logic statements and looping structures.

9. Composites
   This module discusses features of composites, creation and usage of Composites in display building.

10. Tips and Tricks
    This module provides extra tips, tricks and information for a variety of objects.

11. Appendix: XOS to ezXOS
    This module provides information on migrating displays from XOS to ezXOS.

Outline Updated: 05-Sept-19
Advanced Display Building
AVEVA Enterprise SCADA

Duration
3 days

Description
This course facilitates the OASyS DNA skills and knowledge required for building advanced SCADA displays. It provides the various methods of data storage, passing parameters and customizing displays.

Upon completion of the course, learners will be able to use advanced display building techniques in the OASyS DNA Graphical User Interface.

Audience
This course is intended for personnel responsible for development of custom SCADA project displays in an OASyS DNA environment.

Prerequisites
It is recommended that participants have taken the Display Building course. Participants should have a basic understanding of programming in a Windows environment and good display building skills.

Part Number
17000704444
Advanced Display Building
AVEVA Enterprise SCADA

Course Content

1. **Advanced Display Building Outline**
   Outline of course.

2. **Display Building Review**
   This module reviews the key concepts of OASyS DNA display building.

3. **Debugging**
   This module discusses the process of debugging, how to set up and handle debugging in Visual Studio.

4. **Data Storage**
   This module discusses the various methods to use in OASyS DNA displays to deal with Data Storage.

5. **Parameter Passing**
   This module discusses how to pass parameters and information between displays and how to call control panels in code.

6. **Multiple Instancing**
   This module discusses the purpose, setup and use of multiple instancing with displays.

7. **Customizing Displays**
   This module discusses how control panels and the navigation menu works as well as creating a control panel and modifying the navigation menu.

8. **Advanced Display Building Topics**
   This module discusses various advanced topics of OASyS DNA display building.

Outline Updated: 05-Sept-19
Reporting Services
AVEVA Enterprise SCADA

**Duration**
2 days

**Description**
This course explores the use of Microsoft Reporting Services for report creation. Learners will obtain the necessary information required to administer and create reports for Reporting Services.

**Audience**
The course is designed for personnel who will be involved in the creation, management and securing the reports.

**Prerequisites**
Familiarity with basic Realtime and Historical SQL queries.

**Part Number**
17000704460
Reporting Services
AVEVA Enterprise SCADA

Course Content

1. **Reporting Services Outline**
   Outline of course.

2. **Reporting Services Configuration**
   This module examines the components, installation configurations and use of MS SQL Server of Reporting Services as well as the startup and shutdown of the service.

3. **Reporting Clients**
   This module introduces the different reporting clients of Reporting Services.

4. **Exploring and Creating Reports**
   This module explores the baseline reports, helper utilities and the creation of reports and templates in Reporting Services.

5. **Deploying Reports**
   This module identifies the several ways of deploying the Reporting Services items from the development environment to the Report Server.

6. **Scheduling Printed Reports**
   This module discusses how to schedule printed reports using the AVEVA Printer Delivery Extension and the command line utilities to schedule reports.

7. **Reporting Services Security**
   This module examines the Microsoft Reporting Services security model.

Outline Updated: 05-Sept-19
Report Generation
AVEVA Enterprise SCADA

Duration
2 days

Description
This course explores the use of Microsoft Excel and ODBC data retrieval for creation of ad-hoc and scheduled reports.

Audience
This course is designed to meet the needs of Senior SCADA Operators responsible for periodic reporting of SCADA data. System Administrators would also benefit from this course.

Prerequisites
Learners should have completed the OASyS DNA Essentials course. A good understanding of SQL and VBA for Microsoft Excel is strongly recommended.

Part Number
17000704441
Report Generation
AVEVA Enterprise SCADA

Course Content

1. **Report Generation Outline**
   Outline of Course

2. **RealtimeDB Navigation**
   This module discusses finding your way around the RealTimeDB, looking at the RealTimeDB structure, SQL for RealTime Services and registered procedures.

3. **HistoricalDB Navigation**
   This module discusses finding your way around the HistoricalDB, looking at the HistoricalDB structure, SQL for Historical Services, user tables, views and procedures.

4. **Baseline Reports and Templates**
   This module introduces baseline reports including intent, features of baseline reports, executing baseline reports, core design and use, connection models, use of Parameters and Errors sheets, creating a new report definition, Visual Basic editor tools & features, and editing Visual Basic code.

5. **Navigating Baseline Templates**
   This module explores the structure and code of the ADO template, coding and design concepts, and VBA commands and functions

6. **Forms**
   This module details how to create a form for user input for a report, the form design interface, and calling forms from reports.

7. **Scheduling Reports**
   This module discusses how to produce reports in a timely fashion by using the Windows Job Scheduler and troubleshooting scheduled reports.

8. **Advanced Reporting**
   This module discusses expanding the baseline template for creating reports with multiple queries, reports with multiple datasources and customizing the report format.

Outline Updated: 05-Sept-19
Operation & Control
AVEVA Enterprise SCADA

Duration
1-2 days

Description
This is a highly customized dedication training using the customer’s system displays. This course focuses on the user interface by exploring the navigation and organization of system displays. Alarm recognition and acknowledgement, device controls and overrides, operational communication and printing are covered in detail. Upon completion of this course, learners will have the necessary skills to effectively monitor and control field equipment connected to the OASyS DNA system.

Audience
This course is aimed at personnel responsible for monitoring and controlling field equipment.

Prerequisites
Before attending the course, we recommend that students have a basic understanding of their field equipment and its operational role.

Part Number
17000704457 (Advanced)
17000704458 (Beginners)
Course Content

1. **Introduction**
   An introduction to SCADA, an OASyS system overview, and terminology relevant for the OASyS system operators is presented.

2. **XOS Interface**
   Introduction to the XOS user interface including windows, mouse options, keyboard interaction, and navigation techniques.

3. **Display Organization**
   Baseline display organization is explained, including database summaries, communication summaries, service topology, and trending.

4. **InstAlarm Component**
   Alarm system behavior and control are discussed. Includes nuisance alarm suppression, alarm response, alarm states/colors, alarm limits and levels, and inhibits/filters.

5. **InstEvent**
   Automatic logging of system events is explained. An overview of the event summary, and event information relating to controlling devices is presented.

6. **Controlling Devices and Overrides**
   Device-specific control and monitoring techniques are described. This includes changing device states, set points, scanning, tagging, overriding RealTime rates/states, and Historical data.

7. **Printing**
   How to manage hardcopy output through reports, (windows) displays such as device layouts or maps, and event logs.

8. **Final Questions and Answers**
   An opportunity to further your understanding of OASyS DNA operations.

Outline Updated: 05-Sept-19
Gas Suite Overview
AVEVA Pipeline Operations for Gas

Duration
3 Hours

Description
This course is designed for internal employees to get familiar with the gas industry, GMAS system and user interface.

Audience
This course is designed for all the personnel that need to use the GMAS application. This includes system analyst, programmers, developers and designers.

Prerequisites
There are no prerequisites for this class. Gas industry knowledge is an asset.

Part Number
17000704436 (ILT)
17000704404 (WebEx)
Gas Suite Overview
AVEVA Pipeline Operations for Gas

Course Content

1. **Gas Suite Overview Outline**
   Course Outline

2. **Gas Suite Overview**
   This module introduces the components, dataflow, objects and major concepts of GMAS

3. **Gas Suite User Interface Basics**
   This module introduces how to log in and out of the application and explore the customization within the GMAS workstation. The module also demonstrates how to view GMAS data.

Outline Updated: 05-Sept-19
Liquid Suite Overview
AVEVA Pipeline Operations for Liquids

Duration
3 Hours

Description
This course provides an overview of Liquid Management Suite (LMS). It covers the relationship between major applications.

Audience
This course is designed for personnel who will be involved in the configuration of an OASyS LMS system.

Prerequisites
OASyS Essentials or equivalent experience is recommended.

Part Number
17000704437 (ILT)
17000704466 (WebEx)
Liquid Suite Overview
AVEVA Pipeline Operations for Gas

Course Content

1. Liquid Suite Overview Outline
   Course Outline

2. Liquid Suite Overview
   This module discusses the functionality of the LMS applications, relationships between major applications, LMS displays and configuration forms.

Outline Updated: 05-Sept-19
Pipeline Fundamentals
AVEVA Enterprise SCADA

**Duration**
1 day

**Description**
Introduction to the pipeline industry, pipeline components, and pipeline control.

**Audience**
This course is intended for anyone requiring an understanding of the basic concepts of the pipeline industry.

**Prerequisites**
None.

**Part Number**
17000704440 (ILT)
17000704396 (WebEx)
Course Content

1. **Pipeline Fundamentals Outline**
   Outline of course.

2. **Pipeline Fundamentals Overview**
   This module discusses the history of the pipeline industry, pipeline facts, types of pipelines, and pipeline safety and environment.

3. **Sims/Diffs of Gas and Liquids Pipelines**
   This module compares the similarities and differences between gas and liquids pipelines.

4. **Pipeline Components**
   This module discusses pipes, valves, meters, meter runs, storage, pigs/scrapers, pumps/compressors, surface facilities for oil and gas processing.

5. **Measurement**
   This module discusses the concepts of measurement, quality of measurement, gas measurement, liquid measurement, and metering.

6. **Batched Pipelines**
   This module examines batched pipelines, batch sequencing, and separation of batches.

7. **Pumps and Drivers**
   This module discusses pump units (station equipment, pump control, unit statistics), prime movers, and station layout.

8. **Natural Gas Compressors**
   This module discusses compressor stations, centrifugal compressors, reciprocating compressors, and prime movers.

Outline Updated: 05-Sept-19
GMAS Configuration & Operations
AVEVA Pipeline Operations for Gas

**Duration**
3 days

**Description**
The course GMAS Configuration and Operations provides a detailed look at the configuration and operation of the Gas Measurement and Analysis System (GMAS). It provides an interface to Gas Measurement Database and functionality to configure and administer the Gas system.

This course provides a detailed look at the configuration and operation of GMAS. It serves as an entry point for measurement analysts, operators and clerks in understanding how the system operates.

**Audience**
The course is designed for all personnel who need to use the GMAS application. It serves as an entry point for measurement analysts, operators, clerks and system administrators in understanding how the system operates.

**Prerequisites**
There are no prerequisites for this class. Gas industry knowledge is an asset.

**Part Number**
17000704451
GMAS Configuration & Operations
AVEVA Pipeline Operations for Gas

Course Content

1. **GMAS Config & Operations Outline**
   Outline of course.

2. **GMAS Overview**
   This module introduces the components, dataflow, objects and major concepts of GMAS.

3. **GMAS User Interface Basics**
   This module introduces how to log in and out of the application and explore the customization within the GMAS workstation. The module also demonstrates how to view GMAS data.

4. **GMAS Measurement Object Creation and Connectivity**
   This module discusses how to connect GMAS measurement objects per their hierarchy and the Date/Time effectiveness for GMAS objects and connection properties. The module also explains the GMAS object hierarchy, how to create meters, gas qualities, measurement point, stations, and sites.

5. **GMAS Business Object Creation and Connectivity**
   This module explains about GMAS Business Entities and demonstrates how to create and connect GMAS Business Objects per their hierarchy.

6. **GMAS Balance Object Creation and Connectivity**
   This module explains how to create GMAS balance entities and demonstrates how to create and connect GMAS balance objects per their hierarchy.

7. **GMAS ezXOS Screens and Flow Totals**
   This module shows how to view meters and gas quality data in ezXOS and how to create and view flow totals.

8. **GMAS Validation and Estimation**
   This module explains how GMAS validates data, and how to enable and disable validation objects, and validation rules. The module also discusses how to enable and disable automatic estimation of data.

9. **GMAS Viewing and Modifying Data**
   This module shows how to view and modify GMAS data, and interpret the various states, flags and colors. It also demonstrates how to enter sampled or irregular data, how to poll a remote, and how to accept invalid data.
GMAS Configuration & Operations
AVEVA Pipeline Operations for Gas

Course Content

10. **GMAS Closing and PPAs**
    This module explains how to close GMAS data and how to approve Prior Period Adjustments.

Outline Updated: 05-Sept-19
GMAS Administration
AVEVA Pipeline Operations for Gas

Duration
1 day

Description
This course provides a detailed overview of the maintenance and administrative requirements for a GMAS system. The use of GMAS administration utilities will be examined and applied to the day-to-day management of the system.

The AVEVA Gas Suite is a comprehensive collection of applications designed specifically for the needs of gas transmission and distribution companies. Each application provides an in-depth focus on a specific set of challenges; working together, they use and reuse data, providing critical information with minimal effort. AVEVA GMAS functions convert, store, and secure every transaction. Industry-approved calculation methods compare and validate data.

The state-of-the-art technology inherent in the Sightline user interface technology facilitates quick, accurate, and efficient management of massive volumes of measurement data. Analysts can easily adjust any erroneous data arriving in the system. All manual and automated changes are tracked to ensure that all adjustments will withstand rigorous financial and regulatory scrutiny.

Audience
This course is designed for personnel responsible for the administration of a GMAS application.

Prerequisites
Recommended completion of the GMAS Operation and Configuration course. Basic knowledge of Relational Database concepts and maintenance would be beneficial.

Part Number
17000704452
GMAS Administration
AVEVA Pipeline Operations for Gas

Course Content

1. **GMAS Administration Outline**
   Outline of course.

2. **GMAS System Configuration**
   This module discusses the various modules of GMAS, how to create unit and precision profiles, how to create and modify Adjustment Codes, manage GMAS user accounts and debug the HMI.

3. **GMAS Gas Processing Subsystem**
   This module introduces the GPS data flow and the role of the major GPS processes.

4. **GMAS Monitoring Utilities**
   This module explores the use of the various system monitoring utilities as well as what logs are being produced, and where they are kept.

5. **GMAS Maintaining GMAS**
   This module discusses the management and troubleshooting procedures with GMAS queues, how to delete GMAS objects, and explore the issues related to archiving GMAS data.

6. **Appdx - GMAS Data Exchange**
   This module explains how to transfer data to and from GMAS and the Generic Output/Input Utility.

7. **Appdx - GMAS Data Model**
   This module discusses the key EFM Database Tables and Relationships, objects and object items and audit versions and how they work

8. **Appdx - GMAS Queues**
   This module explains the purpose of the major queues, which processes empty out the major queues and which queues require manual intervention.

Outline Updated: 05-Sept-19
GDO Configuration & Operation
AVEVA Gas Day Advisor

Duration
2 days

Description
This course provides a detailed look at the configuration and operation of GDO. It covers the task and knowledge required by measurement analysts, operators and clerks to configure and use the Gas Day Operations applications and utilities.

AVEVA Gas Day Operations (GDO) provides gas distribution companies with a means for their operators to set up, monitor, and balance their supply and demand forecasts daily.

Audience
The course is designed for all the personnel that need to use the GDO application. This includes measurement analysts, clerks, operators and system administrators.

Prerequisites
There are no prerequisites for this class. Gas industry knowledge is an asset.

Part Number
17000704451
GDO Configuration & Operation
AVEVA Gas Day Advisor

Course Content

1. GDO Outline
   The outline of the course.

2. An introduction to GDO
   This module introduces the GDO functionality.

3. GDO Configuration
   This module describes how to configure balancing points, contracts, business entities and everything else you need to have to make GDO function properly.

4. GDO Forecasting
   GDO allows you to create gas load forecasts based on weather history and forecasts. This module shows how this is done.

5. Monitoring GDO data
   This module describes the various tools that are available to compare the planned gas load with the actual gas load.

6. Logs and Reports
   This module covers various utilities, reports and historical logs.

Outline Updated: 05-Sept-19
LMS Configuration & Operation
AVEVA Pipeline Operations for Liquids

Duration
4 days

Description
This course guides students through the required configuration to create a pipeline model for metering, tanking, batch tracking and leak detection using the Liquids Management System (LMS) on OASyS.

Audience
This course is designed for personnel who will be involved in the configuration of an OASyS LMS system or need to understand the database requirements to be able to model and operate their pipeline.

Prerequisites
OASyS DNA Essentials or equivalent experience is recommended.

Part Number
17000704438
LMS Configuration & Operation
AVEVA Pipeline Operations for Liquids

Course Content

1. **LMS Overview**
   This module discusses the functionality of the LMS applications, relationships between major applications, LMS displays and configuration forms.

2. **Virtual Flow Computers**
   This module explores Virtual Flow Computer - data flow, MCF configuration and VFC new functionality and operation.

3. **Batch Transfer Management**
   This module explains Batch Transfer Management, ticket management, and Batch Transfer configuration and operation.

4. **Tank Management**
   This module discusses the Tank Configuration, Tank Functions and Tank Inventory and Counters.

5. **Countdowns**
   This module discusses the various types of Countdowns, types of countdown events and alarms and ezXOS countdown displays.

6. **Pipeline Modeling and Configuration**
   This module discusses the LMS Pipeline Model, the Batch Tracking configuration and compiler and the Pipeline Editor Tool.

7. **Batch Tracking**
   This module discusses the Batch Tracking Displays, ETA’s Current Nodes, Batch Editing (Reverting, Snap Shots), and Hydraulic Profiles.

8. **Leak Detection**
   This module introduces OASyS Leak Detection, the Leak Detection Methods, PLM configuration, the Balance Signature Plot and Pressure/Flow Rate Monitoring.

9. **Pump Management**
   This module discusses the Pump Management, tables used for configuring pump, Pump Statistics, Pump Power Management, Pump station efficiency and pump operation.
10. Valve Management
This module discusses the Valve management, various valve types, valve connection types, valve states and extended polled states.

11. Action Sequence
This module introduces Action Sequence benefits, configuration of action sequence, Action Sequence designer and types, state transitions, and Action Sequence - operations.

12. Product Compatibility
This module explores the Product Compatibility - Rules, Product Transfer Checking (PTC), Product Transfer Checking – Flowxfer configuration, DRA Configuration and Injector Application.

13. Reflex
This module discusses the Reflex monitor application, Reflex ezXOS Displays and the Advanced Database Editor tables used for configuring Reflex.

14. ALP
This module discusses the Advanced Logic Processor (ALP), ALP ezXOS Displays and the Advanced Database Editor tables used for configuring ALP.
Train the Trainer
AVEVA Certified Training Program

Duration
2 days

Description
This course will enable participants to understand how adults learn, and how to deliver OASyS DNA courses. It focuses on how adults learn technical information and techniques and tools that makes the training effective.

Audience
This course is aimed at people who will be delivering OASyS DNA courses.

Prerequisites
A good understanding of the subject matter associated with the courses that the student will be delivering.

Part Number
17000704443
Train the Trainer
AVEVA Certified Training Program

Course Content

1. **TTT Outline**
   Outline of course.

2. **TTT Training Adults**
   A discussion about how adults learn technical information.

3. **TTT Course Walkthrough**
   A walkthrough of the courses that the students will be delivering. The students will be asked to deliver portions of the courses to the class.

Outline Updated: 05-Sept-19
Applications Programming
AVEVA Enterprise SCADA

Duration
5 days

Description
This course introduces the design and building of applications contained within OASyS DNA solutions.

Audience
This course is intended for personnel interested in application design and building applications within the OASyS DNA solution framework.

Prerequisites
Adequate knowledge of OASyS DNA hardware and software configuration, VB.net and ADO is required.

Part Number
17000704432
Applications Programming
AVEVA Enterprise SCADA

Course Content

1. **Applications Programming Outline**
   Outline of course.

2. **Programming Templates**
   This module provides an overview of OASyS DNA programming templates.

3. **VB Syntax**
   This module provides an overview of Visual Basic Syntax.

4. **Programming Essentials**
   This module introduces the OASyS DNA directory structure, error logs, error messages and the Object Browser.

5. **SQL API**
   This module reviews the SCADA databases, SQL access using ADO.NET concepts and the security mechanisms for the databases.

6. **PubSub API**
   This module explains the PubSub concept, tools and the methods to connect, retrieve and publish data.

7. **Business Objects API**
   This module explains the Business Object concept, tools and the methods to execute Business Objects and read data.

8. **Process Monitoring API**
   This module explains the process monitoring concept, tools and the methods associated with process monitoring.

9. **Services and Arbitration API**
   This module explains the concepts of services and arbitration, tools and the methods associated with services and arbitration as well as DistribuSyS methods.

10. **Alarm and Eventing API**
    This module explains the concepts and methods associated with alarming and eventing as well as retrieving GMT system time.
Applications Programming
AVEVA Enterprise SCADA

Course Content

11. **Application Integration API**

   This module discusses how to integrate a program to run in your SCADA system and the methods involved.

Outline Updated: 05-Sept-19
Certified SCADA Professionals (CSP)

Program Information Package

Included in this information package:

- CSP Program Overview
- CSP Program Details
- Certification Requirements
- Recertification Information
- CSP Examination Information
- Preparatory Courses
- CSP Code of Ethics
- Professional Certification Application Instructions
- Professional Certification Application Form

Part Number Preparations
17000704433

Part Number Exams
17000704434
Certified SCADA Professionals Program Overview

The Certified SCADA Professionals (CSP) Program is dedicated to being the premiere SCADA certification program recognizing professionals in the SCADA industry. The program assesses knowledge and identified skills for SCADA specialists whose responsibilities include installing, managing, troubleshooting, and supporting SCADA installations.

Designed in collaboration with SCADA industry stakeholders, AVEVA’s certification program delivers regulatory readiness and promotes SCADA best practices for your organization.

Through the AVEVA Certified SCADA Professionals Program you will have the confidence that your certified SCADA professionals are proficient in maintaining and administering all aspects of your SCADA system.

AVEVA’s program includes three certification levels: Professional, Associate, and the new SCADA for Operators certificate.

Utilizing exams, professional development, and continuing education, the program ensures that employees meet and maintain the AVEVA standard of SCADA proficiency.

Designation as a Certified SCADA Professional at the Professional and Associate level recognizes an individual demonstrated competency in SCADA specific technology areas, including:

- SCADA Fundamentals
- SCADA Security Fundamentals
- Live SCADA System Administration: Industry Best Practices

The new SCADA for Operators certificate level focuses on key elements of SCADA system fundamentals, SCADA security fundamentals, and alarm management strategies. Like the other certification levels, SCADA for Operators takes a —best practices‖ approach in presenting information relevant to SCADA operational staff.

SCADA Certification is appropriate for SCADA Specialists, Technologists and Contractors; SCADA Systems Administration, or Support Personnel; SCADA Operational Staff; Vendor Customer Service Representatives; and Vendor SCADA Project Employees.
Certified SCADA Professionals
Program Details

Mission Statement
The Certified SCADA Professionals Program is the premiere certification program for individuals administering or supporting computer-based systems used for supervising, acquiring data, and controlling live, real-time processes.

Certification Goals
CSP Certification provides a high quality professional examination process to enhance the standing and technical diligence of SCADA system professionals. The goals for the Certified SCADA Professionals Program are:

- To provide a means for an individual or organization to assess their skills against a recognized and appropriate industry standard.

- To establish a recognized standard that ensures anyone who has access to a live SCADA system for the purposes of support and/or administration has met a minimum level of competence and is aware of the best practices for performing specific tasks in a safe, productive and professional manner.

- To certify that employees who provide SCADA support services are properly prepared for the professional responsibilities of successfully supporting a SCADA system environment and fully understand the impact of their actions affecting the safety and reliability of the operation.

By earning a Certified SCADA Professionals credential, individuals have demonstrated that they have the skills necessary to provide organizations with successful management, implementation, support, and administration of SCADA systems being employed today, and in the future. Organizations adopting the AVEVA Certified SCADA Professionals Program ensure that employees or contractors working on their SCADA system have been evaluated and have met the required level of knowledge and competency as defined in the standard.

With the awarding of the CSP certificate the certificant has the right to use, and is encouraged to display the CSP credential as recognition of accomplishment within the SCADA industry (i.e. Business card, official correspondence, etc.)

There are three certification levels offered within this program:

- Certified SCADA Professionals – Professional, denoted by CSP-P
- Certified SCADA Professionals – Associate, denoted by CSP-A
- Certified SCADA Professionals – Operator, denoted by CSP-O

Program Synopsis
The program has been developed with input from several stakeholders within the SCADA industry, after extensive interviewing and consolidating an industry needs analysis. The Certified SCADA Professionals accreditation is for SCADA specialists, whose responsibilities include installing, maintaining, extending, troubleshooting, and operating SCADA systems.
Certification Requirements

Professional

Becoming a successful SCADA Professional requires five (5) years of experience in heterogeneous, real-time networked computing environments, managing day-to-day issues, and developing best practices to successfully perform specific tasks in a safe, productive and professional manner. This experience is required in addition to meeting the education, training, security and testing requirements for this certification.

The candidate must meet the criteria outlined below, and submit the Certification Application for review by the Certification Advisory Board.

Requirements for Professional Certificate:

Education
- Technical Diploma, Degree in Sciences or equivalent experience.

SCADA Experience
- A minimum of five (5) years’ experience in a SCADA environment working directly with maintenance, alteration, extension or security tasks on a live system (please see Section C of the Certification Application Instructions to determine what is applicable—SCADA Experience for the purposes of this certification program).

SCADA Vendor Training
- Evidence of having attended a minimum of two training classes (40 hours total) provided by a SCADA vendor or approved vendor representative. The training taken should be in the areas of system configuration and administration.

Security Requirement
- Meets the security clearance requirements as determined by this program in accordance with the provisions mandated by their employer, or by the client to whose SCADA system they will have access.

SCADA Certification Preparation Course(s)
- Although optional, it is recommended that individuals interested in obtaining their Professional certificate attend the appropriate preparatory course(s).

Certification Exam
- Passing the Certified SCADA Professionals examination with a score of 75% or higher in each section of the examination.

Associate

For organizations that mandate—anyone who touches the key board affecting a live SCADA system must be certified!—an entry-level certification credential is necessary to allow new or junior members of the SCADA group authorized access to the system. The AVEVA Certified SCADA Associate credential meets this requirement.

This designation allows an Associate to work on a system under the supervision of a Certified SCADA Professional and ensures the Associate has met the knowledge requirements of the credential as outlined below.
Certification Requirements (continued)

A certified—SCADA Professional should be responsible for reviewing and monitoring the activities of the Associate, as well as providing guidance and mentoring in areas of the profession the Associate is striving to gain knowledge.

Requirements for Associate Certificate:

SCADA Certification Preparation Course(s)

- It is highly recommended that individuals interested in obtaining their Associate certificate attend the appropriate preparatory course(s).

Certification Exam

- Passing the Certified SCADA Professionals examination with a score of 75% or higher in each section of the examination.

Note: a CSP - Associate may apply for their Professional certification at any time while the individual’s Associate certification is valid (however, the recertification date will be based upon the original date of their Associate certification).

SCADA for Operators

Having relevant, supporting knowledge in key SCADA areas can aid SCADA operational staff in making safe, productive, and professional decisions that may impact the operation and management of their SCADA system.

The SCADA for Operators certificate level was added to the Certified SCADA Professionals program to provide individuals and organizations with a means to obtain and evaluate this knowledge within their operational staff.

The intent of this certificate level is not to replace, impact, nor contradict an organization’s specific operating procedures, as these vary widely from company to company. Rather, the concepts presented and evaluated are those that share commonalities across all SCADA industries, and are rooted in recommendations from numerous industry regulatory bodies.

While each organization will have its own specific framework of operating procedures, this designation helps to measure an individual’s understanding and awareness of supporting SCADA concepts, as they relate to SCADA operations.

Requirements for SCADA for Operators Certificate:

SCADA Certification Preparation Course:

SCADA for Operators

- It is highly recommended that individuals interested in obtaining their SCADA for Operators certificate attend the appropriate preparatory course.

Certification Exam

- Passing the SCADA for Operators examination with an overall score of 75% or higher.
Recertification Information

Several factors in the constantly changing SCADA & IT environment can impact a AVEVA Certified SCADA Professional's certification status including but not limited to:

- Updates to technologies or products
- Transfer in an industry job or role
- Integration of additional applications

These factors can cause a SCADA Professional's certification status to become outdated. Given such changes, and the rapid advancement of technologies in the industry, SCADA Professionals and employers need a method for ensuring skills that are new or emerging and are in use.

The Certified SCADA Professionals program includes a recertification policy and program designed to provide SCADA professionals with a manageable and cost-effective way to prove they have maintained and updated their technical knowledge and skills.

Recertification Objectives

The following are objectives for the CSP Recertification Program:

- Provide a clear methodology for SCADA professionals.
- Maintain the integrity and value of certifications by focusing job roles on current industry practices.
- Maintain communications with AVEVA Certified professionals to help ensure our customers' needs are addressed in the certification program revisions.
- Recognizing professional growth achieved through Continuing Education in a SCADA related topic.

Recertification Interval

Unless otherwise stated, all levels of certification are valid for five (5) years from the original date of certification.

The Recertification Process

Members may become recertified by either passing the current Certified SCADA Professionals examination for their level; or meeting the continuing education requirements of the CSP recertification process.

- For Professional recertification, the certificant must also complete the Recertification Application, which will include proof of attending a minimum of 40 hours of relevant continuing education. The application will be submitted to the CSP Board at least 60 days prior to the expiration of your current certification.
- The CSP Board will review the submitted continuing education documentation for relevance and has the sole responsibility for making the final decision for approval.

Note: to be considered for Professional level certification, a CSP - Associate must complete and submit the application for Professional certification, in addition to meeting the above requirements for recertification.
Certified SCADA Professionals Examination

The Certified SCADA Professionals examinations are designed to test for core knowledge required by each certification level. The examination for Associate and Professional levels is three (3) hours in duration, and is comprised of three (3) sections. Each section is scored independently. The SCADA for Operators examination is one (1) hour in duration.

On the day of the examination, candidates must report to the testing center no later than five minutes prior to their scheduled appointment. Late arrivals will not be admitted.

The proctor will provide participants with a pencil and scratch paper. Participants will not be allowed to bring any additional scratch paper, reference materials, calculators, or any forms of electronic communication devices (cell phones, pagers, PDAs) into the testing room.

Complete examination procedures will be provided to all participants.

Examination Content
Each exam consists of multiple choice, true/false, and matching/completion questions.

Preparatory Courses
Although these courses are optional, AVEVA offers preparatory courses designed to assist CSP candidates in preparing for taking their examination.

Classroom-based Preparatory Courses
These courses are delivered at our classrooms located in either Calgary or Houston, or may also be facilitated at your site.

SCADA Certification Preparation Course: Associate/Professional

Duration: 4 days

Description: This course is designed for SCADA personnel wanting to obtain their Professional or Associate level certification as part of the AVEVA Certified SCADA Professionals (CSP) program. It combines three of the CSP preparatory courses: SCADA Fundamentals; SCADA Security Fundamentals; and Live SCADA System Administration: Industry Best Practices, in a classroom-based format. The course presents all concepts from these key areas as well as provides instructor-led review time to help better prepare participants for successfully writing the CSP examination.

SCADA Certification Preparation Course: SCADA for Operators

Duration: 1.5 days

Description: This course provides participants with key supporting information in the areas of SCADA system fundamentals, SCADA security, alarm management strategies, and industry—best practices. By understanding the information presented in this course, operational staff should be better equipped to make safe, productive, and professional decisions that may impact the operation and management of the SCADA system.
Web-based Preparatory Courses

Our web-based courses are typically delivered in two (2) hour sessions. Sessions are usually scheduled in both the morning and afternoon. Our web-based training courses include both a presentation component over the Internet and voice component via a telephone conference.

SCADA Fundamentals (web-based)

Duration: 8 hours

Description: This course presents an overview of current technologies and components used in Supervisory Control and Data Acquisition (SCADA) systems. Industry terminology and definitions are detailed.

SCADA Security Fundamentals (web-based)

Duration: 8 hours

Description: This course is aimed at SCADA professionals tasked with developing and maintaining the security of a SCADA system and all layers associated with the transmission of data from the field devices to the SCADA host and into the enterprise. The course will also deal with the preservation and integrity of stored data within the Enterprise.

Live SCADA System Administration: Industry Best Practices (web-based)

Duration: 4 hours

Description: This course is designed to present SCADA industry — Best Practices for performing maintenance, administration and other system tasks on a — live SCADA system. It also provides a thorough review of an Industry — Best Practices SCADA System Maintenance Plan, reviews SCADA system failures, and presents a methodology for Alarm Management.

Please contact us for more detailed course outlines.

Document Updated: 05-July-18
Certified SCADA Professionals Code of Ethics

Each vocation has a code of ethics to ensure that its practitioners behave responsibly. The code states not just what its practitioners do, but what they should do. Professionals can be ejected from their professional societies or lose their license to practice for violating the code of ethics. Adherence to a recognized code of conduct helps professionals feel they belong to a well-regarded community, and enforcement of ethics standards helps maintain a minimum level of conduct.

SCADA skills and tasks are a blend of software engineering activities combined with telecommunications and engineering principles applied to a variety of industry applications involving the monitoring & control of distributed processes. The following is adapted from the IEEE Code of Ethics.

We, the Certified members of the SCADA Profession, in recognition of the importance of our technologies in affecting the quality & safety of our clients, and in accepting a personal obligation to our profession, its members and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct and agree:

- To solicit, accept, as well as offer candid criticism of SCADA technical undertakings, to identify and correct errors where possible and to recognize the contributions of others involved in SCADA related work
- To refuse all forms of bribery that in any way may influence conduct in SCADA activities and responsibilities
- To prevent conflicts of interest, real or perceived, and to inform other parties when they do exist
- To endeavor to improve our technical SCADA expertise and to accept tasks for others only if qualified, or after revealing all relevant limitations
- To be open and reasonable when providing estimates or evaluations based on available information or observations
- To improve the overall understanding of the SCADA industry and technologies employed within, direct the appropriate application of the technologies, and communicate any potential consequences therein
- To make responsible decisions, consistent with the safety, health and welfare of the public, and to provide timely communication of any factors that have potential to endanger the public or the environment
- To assist colleagues and subordinates in their professional development in the SCADA field and to support their adherence to this code of ethics
- To not injure the property or reputation of others by false or malicious actions of any kind
- To treat fairly all persons regardless of such factors as race, religion, gender, disability, age, or national origin.
Certified SCADA Professionals Program Professional
Level Certification Application Instructions

General
The following application form should be used for application for Professional level certification under the AVEVA Certified SCADA Professionals program. Please note there is no application form required for Associate or Operator level certification. This form is intended for first-time applicants who are seeking Professional level certification, or currently certified Associates seeking to upgrade their certification level. The Certification Advisory Board will hold all application information in the strictest confidence and information will be restricted to authorized personnel for certification purposes only.

To receive full credit for all education and experience, the form MUST be filled out completely. For submissions that do not meet the requirements for certification, the Certification Advisory Board will provide a detailed written response indicating reasons for failure to comply with requirements.

Incomplete forms will not be returned.

Section A – Personal Information
This information is necessary if personal files are to be complete. Please fill it out completely. Type or print clearly.

Section B – Education
The education requirement for certification is a Technical Diploma, Degree in the Sciences or equivalent experience. Copies or transcripts of Post-Secondary degrees, diplomas, or certificates MUST accompany the application.

Further information may be required if the Certification Advisory Board has not evaluated the program of study.

For applicants wishing to gain credit for equivalent experience, a list of the experience, complete with dates, duration and description of responsibilities, the organization the individual worked for to gain the experience, and verification by a supervisor, or former supervisor must be supplied.

Section C – SCADA Experience
To meet the requirements for Professional (Level II) certification, the applicant must have a minimum of five (5) years relevant SCADA experience. This section MUST be completed with details. —SCADA Experience is defined as applied —on-the-job experience working with computerized systems used in real-time monitoring & control of distributed processes, including networking and telecommunications technology. To meet the requirements of the program, an individual is required to have experience in various key areas listed below:

- Automation / DCS
- Telecommunications, VSAT
- Protocol Specialist
- Real-time Process Control
- 24x7 On-Call SCADA Support
- Process Improvement
- SCADA Software Developer
- SCADA Maintenance
- Instrumentation
- Field Electrician
- SCADA Computer Support
- Measurement
- SCADA Project Management
- Risk Management
- Live SCADA System Administration - Displays, Configuration, Troubleshooting
The applicant must provide documentation of their SCADA experience complete with the signature of a company official that verifies that the applicant has the experience stated.

**Section D – SCADA Vendor Training**

Certification requires a minimum of two SCADA vendor-training classes (a minimum of 40 hours total). A list of SCADA Vendor Training including proof of completion must be attached. Courses indicated must have complete descriptions attached for review. Descriptions must include a general outline, SCADA vendor, the agency providing the course, topics and time spent on each topic.

**Section E – Security**

The AVEVA Certified SCADA Professionals program supports the objectives of —Operational Security and Drug Protection Policies. As such, applicants for AVEVA Certified SCADA Professionals must provide documentation verifying they have met the security clearance requirements mandated by their employer or by the customer whose SCADA system they will have access to.

An authorized security officer from the applicant’s organization MUST verify that the applicant meets the security requirements that it mandates for persons that have access to highly sensitive SCADA information.

**Section F – Other**

This space is for any other information the applicant wishes to provide. Additional sheets may be attached to the application.

**Section G – Applicant’s Declaration**

The application MUST be signed and dated by the APPLICANT.

**Submitting the Application**

Completed applications and supporting documents may be submitted by mail, fax or email.

**Mail to:**

Certified SCADA Professionals Program 49 Quarry Park Blvd, SE, Calgary, T2C 5H9

Fax: 403 259 2926

Email: educational.services-O-G@aveva.com

**Application Processing**

Processing of applications will take approximately 30 days. Once the Certification Advisory Board determines that the applicant meets the criteria for certification, the applicant will then be contacted for scheduling of the AVEVA Certified SCADA Professionals examination for certification.

Completed applications must be submitted PRIOR to writing the AVEVA Certified SCADA Professionals examination. Under special circumstances, applicants may be allowed to submit their completed application within 30 days of writing the examination, however, the Certification Advisory Board must approve this prior to the applicant writing the examination.
Certified SCADA Professionals Program Application for
Professional Level Certification

Type or print all information clearly

Section A — Personal Information
Name: _______________________ Position / Title: _______________________
Mailing Address: _______________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
Email Address: _________________________________________________________
Current Employer: _______________________________________________________  
Work Address: __________________________________________________________
____________________________________________________________________
____________________________________________________________________
Work Phone Number: (___)__________________Fax Number: (___)______________
Supervisor’s Name: ______________________ Supervisor’s Title: __________________
____________________________________________________________________
Supervisor’s Contact Information (email or telephone number): ________________

Section B — Education — The requirement for Professional level certification includes any of the following:
Sciences Degree, Technical Diploma or Equivalent Experience. Attach a copy or transcript of degree(s) or
diploma(s).
Institution: ____________________________ Certificate or Degree: __________________
Institution: ____________________________ Certificate or Degree: __________________
OR
Complete the next section if seeking credit for Equivalent Experience.
For applicants wishing to gain credit for equivalent experience complete the information below. 
*Attach additional SCADA Experiences on separate sheet if required.*

Dates: From: ________________ to: ________________ Title/Position: ____________________________

Organization: __________________________________________ Description of Experience: ________________

________________________________________________________

Dates: From: ________________ to: ________________ Title/Position: ____________________________

Organization: __________________________________________ Description of Experience: ________________

________________________________________________________

Verification of equivalent experience by Supervisor:

I ________________________________ confirm that the above information is true and accurate to the best of my knowledge.

Supervisors Signature: ________________________________ Date: ________________

Supervisors Comments: ________________________________

________________________________________________________

Application will *NOT* be accepted without Education / Equivalent Experience Verification

Section C – SCADA Experience – The applicant must have a minimum of five (5) years relevant SCADA experience verified by a current or former supervisor. *Attach additional SCADA Experiences on separate sheet if required.*

Dates: From: ________________ to: ________________ Employer: ____________________________

________________________________________________________

Duties: ____________________________

________________________________________________________

Dates: From: ________________ to: ________________ Employer: ____________________________

________________________________________________________

Duties: ____________________________

________________________________________________________

Dates: From: ________________ to: ________________ Employer: ____________________________

________________________________________________________

Duties: ____________________________

________________________________________________________

Dates: From: ________________ to: ________________ Employer: ____________________________

________________________________________________________

Duties: ____________________________

________________________________________________________
Duties: 


Verification by Supervisor (SCADA experience must be verified):
I _______________________________ confirm that the above information is true and accurate to the best of my knowledge.
Supervisors Signature: _______________________________ Date: _________________
Supervisors Comments: ______________________________________________________

Section D – SCADA Vendor Training – Certification requires a minimum of two training classes provided by a SCADA vendor or approved vendor representative (a minimum of 40 hours total).

Course Title: _______________________________ Date: ____________ Duration: ____________
Course Title: _______________________________ Date: ____________ Duration: ____________

Attach course descriptions for review by the Certification Board. Descriptions must include a general description, vendor, agency providing the course, topics and time spent on each topic as well as proof of attendance.

Section E – Security – All applicants must meet the security clearance requirements in accordance with the provisions mandated by their employer or by the customer to whose SCADA system they will have access.
I _______________________________ confirm that the above individual meets the security standards and requirements that our organization mandates for individuals that have access to the highly sensitive SCADA information.

(Printed Name and Title)

Signature of Security Official: _______________________________ Date: _________________

Section F – Other – The minimum requirements for Certification are outlined in the Application Instructions. This space may also be used for additional comments.

Section G – Declaration of Applicant
I ___________ confirm that the above information is true and accurate to the best of my knowledge.

Printed Name

Signature of Applicant: _______________________________ Date: _________________