

Demonstration Video Series

Accugraph

Demonstration Video Series

This Central Office Engineering Demonstration covers the following topics:

- Building a bill of materials. Configuring equipment within a central office through a series of question and answer sets.
- Editing The information contained in the bill of materials.
- Generating the drawings which update information within the specific central office.

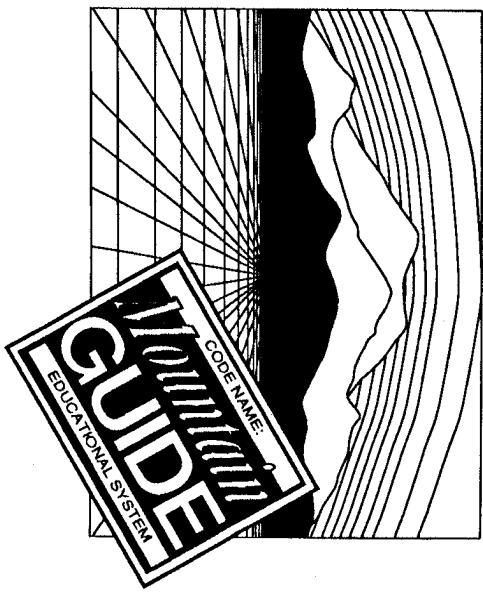
30 Minutes

MGVDVSCOEEMOD - 4/92

Central Office Engineering

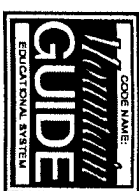
30 minutes

Central Office Engineering



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Accugraph



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Video Content Outline

Central Office Telephony Shell (COTS)

- I. TITLE: Introduction**
 - A. Generic intro!!**
 - B. COTS is an equipment provisioning and configuration tool**
 1. Document Index
 2. Bill of Material List
 3. Cable Running List
 4. Strapping Options List
 5. Narratives Installation Sections
 6. Maintains Installation Drawings
 7. Inforces standardization
 8. Follows a logical flow
 - C. COTS generates:**
 1. Purchase orders
 2. Property record updates
 3. Budget Tracking
 4. Complete project management maintenance
- II. TITLE: Preparing to order equipment**
 - A. Check SBSS for available space**
 - B. Opening a work order**
 - C. Work order options**
- III. TITLE: Ordering new equipment with Q and A menus**
 - Generate appropriate work orders
 - Configuration diagrams
 - Cable running lists
 - Installation specifications
- IV. TITLE: Edit/Viewing**
 - A. Process Spec.**
 - B. Narration/Details**

Video Content Outline

V. TITLE: Updating drawing and database

- A. Drive Drawings**
- B. Save work order**
- C. SBSS graphical representation**

VI. TITLE: Conclusion

- A. Generic outroduction!!**

Script: Central Office Telephony Shell- 4/19/93

Hi, my name is Monica Duncan and I'm with Accugraph corporation. I'd like to welcome you to this telecommunications presentation.

Before we get started, let me tell you a little bit about Accugraph Corporation. Accugraph has been in business for 22 years and has over 9,000 installations worldwide, providing premier solutions in the areas of: architecture, engineering, configuration management, facility management and telecommunications, which is what we will be covering in this demonstration.

Some of the applications that we support in the communications environment include:

- Central Office Engineering
- Land and Buildings Facility Management
- Circuit Information
- Scanned maps including TIFF and GIFF file formats
- Outside Plant Trunking
- and Specialized services including:
 - Call before you dig
 - Traffic Evaluation
 - and the Network Analyst

The Accugraph COE system is used for inside plant engineering functions with additional outside plant services. This system can:

- Automate engineering operations from design to the generation of a bill of materials
- Link embedded and external relational database management systems
- and enhance your ability to configure, track and generate installation packages and notes for central office equipment.

Accugraph's system adheres to industry standards such as X-windows, a motif style interface, and open architecture. PCs can be linked to the system through networks providing client server environments. In addition, a fully customizable user interface is provided.

Each of these applications are based on having integrated access to an external relational database management system where enterprise wide data is stored and can be accessed not only from our applications but also from other strategic business systems that are critical to the operation of the typical communications company or equipment provider.

The industry standard databases that we support include:

- Oracle
- Informix
- Ingres
- and Sybase

These databases run in the background storing and maintaining all of the attribute data that we will be demonstrating today.

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What we will be focusing on today is Accugraph's Central Office Telephony Shell otherwise known as COTS.

COTS is an equipment provisioning and configuration tool designed for the Central Office Engineer.

When he or she receives an order for new equipment, COTS provides:

- Document Indexes
- Bill of Material listing
- Cable running list
- Strapping options lists
- Narrative installation sections
- Maintenance of installation drawings.
- It reinforces standardization and follows a logical flow.

COTS also generates:

- Purchase orders
- Property record updates
- Budget tracking
- and complete project management.

We will divide this presentation into four sections:

- Preparing to order equipment
- Ordering new equipment with sophisticated Q & A menus
- Editing and viewing our results
- and updating drawings in our database information.

Let's go ahead and get started.

Preparing to Order Equipment

Let's begin by reviewing the processes involved in ordering equipment. These include:

- A graphical analysis of the floor plan within your central office
- Generation of the actual work order
- and review of the menu options involved in processing your work order

Graphical analysis of your floor plan begins with a simple click on the telephone network. Here we see a floor plan indicating the locations of each of the bays. With the click of a button, I can view the cable racking. We can also view the electric plan. And finally, we can evaluate the primary and secondary iron work.

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The Accugraph system allows us to analyze a given central office layout to determine where new equipment may be placed and if the new equipment will fit into existing bays.

Once I have reviewed the office environment, additional application tools are available as we go into Show Bay Show Shelf. This function allows me to indicate a bay I am interested in viewing and graphically bring it to the screen with all information pertinent to the bay displayed. As I scroll up and down, I can view the individual cards and shelves in this particular bay. I also have the option of:

- Printing this information
- Retrieving direct content information which is tied directly to our relational database
- Retrieving history or maintenance information on a particular card or shelf
- Changing my status
- Looking at the assignments
- Moving, cutting or pasting any of my information
- and adding notes

All of these operations are tied to the total analysis of the equipment I wish to add to this particular unit.

Let's look at the contents of a particular card. I identify the shelf I am interested in. The system goes out and retrieves the information from the database and immediately displays it. It indicates which shelf I have chosen, the status, the position, the part numbers and a description.

As we view the bay from a front elevation view, we can see the mounting slots listed on the left side. In the next column the status is shown. Possible statuses include: installed, engineered, future, or equipment scheduled for removal. The next column shows the cards in their exact location.

Now let's open a work order. This is done through the Central Office Telephony Shell. As we enter the work order menu, we see a variety of options. The first option is manage. We'll enter the manage option and open a new work order. We need to identify a work order number. Then we need to provide a description and a specific date of implementation.

We have now opened a work order. Next, we'll look at a few of the options available within COTS. Under developing Specs, we have the ability of ordering complete systems or piece parts. We also have the option of retiring equipment or moving equipment from central office to central office.

In this demonstration we are going to order a complete relay rack with additional shelves and cards within the relay rack.

Ordering New Equipment with Q and A Menus

Let's begin to place a new order. This is done through a sophisticated question and answer menu structure that is designed to guide the engineer from one menu to another in a logical format. This

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question and answer session will generate:

- Appropriate work orders
- Configuration diagrams
- Cable running list
- and installation specifications

As we begin the Q&A Session, we notice that we are given the option of choosing which kind of equipment we would like to order. Let's go ahead and select transmission equipment. Notice that we are now isolated in the area of transmission equipment. Let's order a Rockwell-Collins multiplexer from this list. Each previous selection drives the next selection of options that are given to the engineer.

We are given the option of ordering fully-equipped or spare parts of this particular multiplexer. Let's select fully-equipped. It is also asking me if I need a bay or a rack. Yes. The system is intelligent enough to bring up only those racks that are applicable to the particular equipment that I am ordering. Now I'm going to select the vendor and the height. Next I'm going to select the supports.

At this point I need to identify my input code to initiate the order. Now I'll identify a rack I.D. This series of prompts easily guide the engineer through the logical flow of the equipment he or she is ordering.

As I accept or decline each option, the system comes back and gives me only the option of purchasing those vendors with which my company has set standards for. Now I'm going to indicate that the fuse panel that I've ordered is going to be inserted into Bay 101 and it is asking me for mounting position.

Next, I will identify where the multiplexer itself will begin. I will also indicate a cable length and accept my selections.

It is at this point that the Q & A menu goes out and begins completing my order. Based on the specifications that I have given this session, the system has the intelligence to go out and find the necessary cables and connectors that are required for the equipment that I am ordering.

We have now completed our work order. Let's go in and review the bill of materials. We go into the edit material menu. Select edit material and it brings up a complete listing of all the equipment that has just been ordered. As we scroll up and down, the engineer can view all the parts and pieces that are required for the particular equipment that has been ordered.

Note that on quantities, the system had the intelligence to know the number of bolts and the type of cable that was required based on the equipment that I am ordering.