"Prepare For EASY Parking"

Central Facility Management System

ScanNet ®

the power of information you control

FEDERAL APD
Federal Signal Corporation

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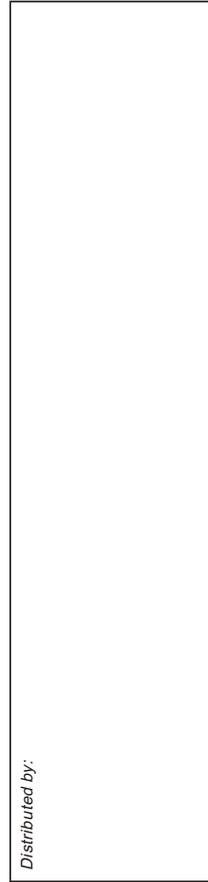Federal Signal Corporation

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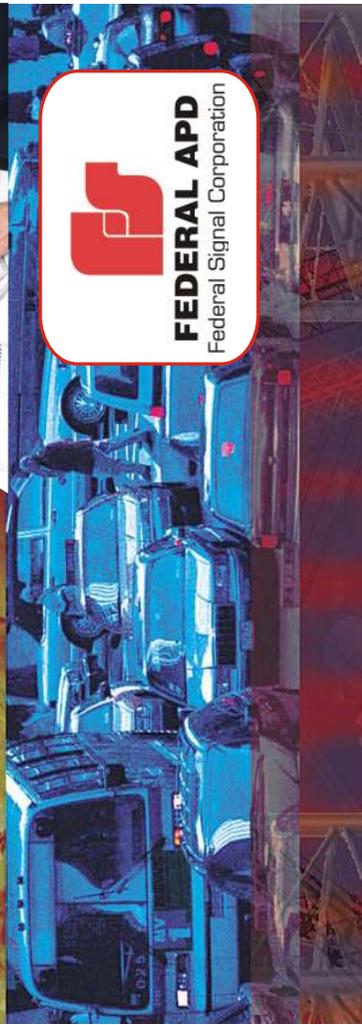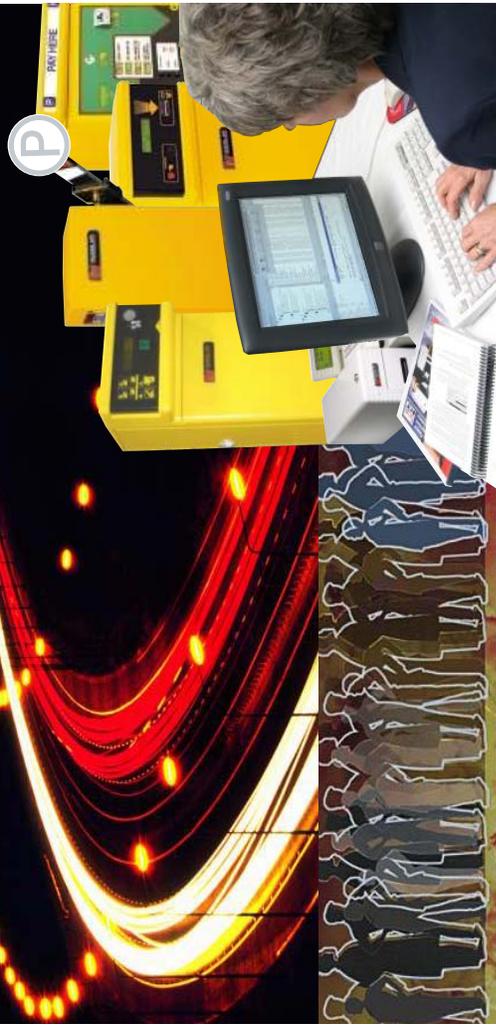• Canada: (800) 331-9144 www.federalapd.com

FEDERAL APD
Federal Signal Corporation

Software Resource Partners

Associations:

Distributed by:

Unleash the Power of Information

In today's competitive environment, you want to take advantage of personal computer technology to control your parking and ground transportation systems. The power of the Windows operating system and the wealth of business applications available make this technology highly attractive. But, when it comes to actually implementing most PC-based central management systems, complications can arise.

Complications arise when you attempt to integrate hardware and software from different vendors, try to maintain multiple databases, and endeavor to get the data to communicate to your accounting system. These tasks not only take time, but they can greatly increase the costs of your management system.

What you need is a solution that gives you the benefits of PC technology and provides an infrastructure that lets you operate as you want. You need a powerful, yet easy-to-use system that consolidates information. You need Federal APD's ScanNet Central Management System.
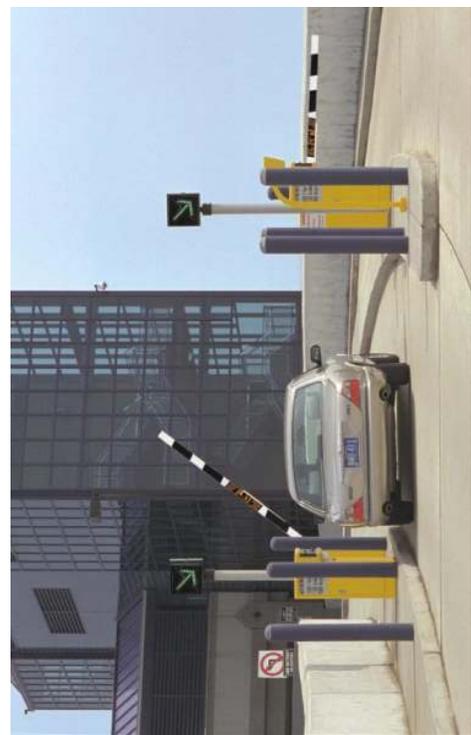
Planned Evolution

ScanNet is a dynamic software package that provides a host of customizable features. Designed to run on a Windows operating system, ScanNet will be capable of taking advantage of future enhancements and features as the Windows operating system evolves.

Protect Your Investment

ScanNet only requires firmware upgrades to interface with all SCAN Facility Management System devices offered, making your existing equipment backwards compatible. This protects your longterm investment in Federal APD products.

Turnkey Solutions

ScanNet provides a new world of central management solutions for parking installations of all sizes, from modest surface lots to wide-area networking systems. Federal APD offers a complete, turnkey package for any parking operation — starting with product specifications that can be easily downloaded from our web site, to complete project management and on-site supervision. Reliable Federal APD products are backed by the industry's best after-sales service and support.

A Solid Foundation to Build On

Every business–whether it's a university, an airport, a hospital, or a municipality— has unique needs for running its parking and ground transportation operations smoothly. Federal APD's team of experts know your business and your needs, from planning considerations to day-to-day activities.

Federal APD has embedded the most advanced and adaptive technology into ScanNet, enabling complete compatibility across the Information Services enterprise. What's more, Federal APD has clearly positioned ScanNet for the future of distributed computing, no matter what evolutionary turns the industry may take. ScanNet gives your operation a solid foundation to build on, for a safe, long-term investment.

System Integrators

Our forward thinking engineers analyzed the needs of tomorrow and assembled plans for future system applications. The design criteria included an open-architecture that uses industry-standard tools to make ScanNet the most flexible system on the market for parking and ground transportation control. Design criteria also included integrating third party Application Programming Interfaces to extend the core capabilities of the ScanNet system.

One of ScanNet's greatest strengths is the degree to which a user or developer can customize the system while mitigating the cost and time of development. ScanNet supports client/server ActiveX and Microsoft Office Automation technologies that make the product easily customizable and flexible.

The ScanNet open architecture integrates ground transportation solutions.

ScanNet is backwards compatible with existing SCAN™ Facility Management Systems.

Parking & Count Control

ScanNet makes it easy to set-up and monitor all your traffic lane equipment. The Event Control System defines the variables for each lane controller in the system and controls the device's tasks such as monitoring transient and monthly parkers, raising a gate arm, automatically triggering a full sign, or activating a variable message sign while storing all the information in the database for real-time and statistical reporting.

Automated count control, integrated with automated revenue control, eliminates the need to manually read counters in lane equipment, and enables the owner/ operator to control the parking of vehicles, not tickets!

Multiple site integration provides complete count information.

Get a complete, up-to-the-minute look at any facility.

Real-time monitoring of lane activities.

Revenue Control

ScanNet provides simple to use tools to manage your revenues from a central location. Pull down menus show remote programming and monitoring of transactions from your revenue control devices. Fee tables, rate structures, and other programming specifications can be designed and tested on the ScanNet host computer and then batch loaded to all the devices in the network. Point-of-sale revenues can be integrated with the general ledger.

The ScanNet System provides a powerful information center to manage your business more efficiently and more profitably. All the features of the Auditor PowerPad Fee Computer, Automatic Pay Stations, and Credit Xpress readers can be customized to your specific parameters- whether you are in the office next door, across the country, or anywhere in the world.

ScanNet provides a complete accounting of all the activities generated by revenue control devices. The core system provides many detailed transaction reports that may be integrated with third-party accounting systems. Crystal Reports Writer allows you to change, modify, and customize standard reports. Information can be exported to a number of different programs, including Microsoft Office, Lotus Notes, WordPerfect, QuickBooks, and a host of other report and accounting packages.

ScanNet now incorporates Central Credit Card Processing.

Along with multi-level security, ScanNet records specific user actions to provide security/or administration log reports.

ntegrated System

The new technology designed into ScanNet architecture challenges traditional thinking for central management systems. Parking, access, and revenue controls are no longer separated in different modules but are bundled together as one seamless enterprise system.

Information generated from all the devices in the system, from barrier gates to fee computers, is accessible by ScanNets Event Control System (ECS).

Access Control

The Access Control System (ACS) enables you to set up Credentials that will allow patrons and vehicles to enter and/or exit a facility. A Credential is an instrument, such as an access card or an AVI tag, that uniquely identifies the patron. When a Credential is set-up, the system automatically places the ID information in all associated Passport Plus, ValuePass, and ValueCard Readers (or other select, third party devices). The Access Control System allows you to associate the Credential with a patron and/or a vehicle – allowing you to assign each to an account for billing and tracking purposes.
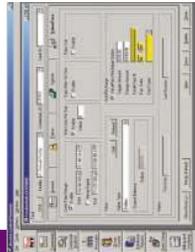
Access Control
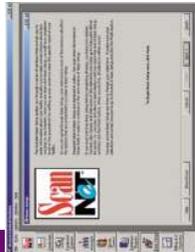
ScanNet Access Control utilizes a sample wizard to simplify set up and configuration.
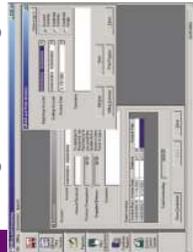
Credential Screens
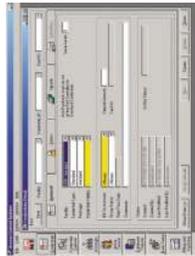
Credential Screens provide easy-to-use formats

ValuePass Credentials

ValuePass, used in conjunction with Central Credit Card, allows you to use AutoRecharge to replenish a ValuePass Credential automatically.
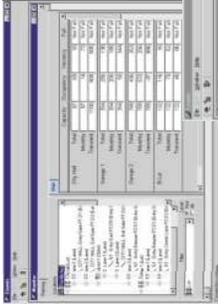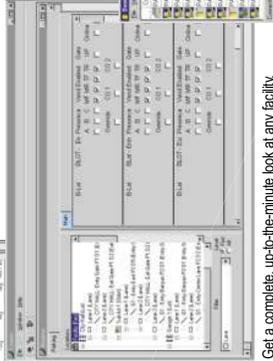
Group Counts Monitor

Group control in ScanNet Access allows you to create groups. You can set up credentials and establish limits for group occupancy. When using Billing and Invoicing, either flat or variable rates can be selected for over-limit uses.

Billing and Invoicing

Billing and Invoicing provides a powerful tool to manage monthly patrons. Billing and Invoicing can be used with both standard and host-based readers.

Credential Explorer

Credential Explorer allows you to create and save queries. It can easily perform maintenance based upon query results for commonly required operations.

Open Architecture

The internal architecture of ScanNet is based on a 32-bit, multi-tasking operating system with the ability to communicate simultaneously to many programs via InterProcess Communications (IPC). The open architecture is made up of multiple layers for processing information that can seamlessly integrate third party applications.

APPLICATION LAYER

Graphical User Interface	Access Control System (ACS)	Central Access Management Program (CAMP)
	Report Generator	Remote Consoles

Provides the link between the user and the ScanNet System. Executions appear on the screen as the Graphical User Interface (GUI), and as reports. Administers all programming, monitoring, and control functions.

SERVICES LAYER

Database Server	Event Server	Message Rebroadcaster

Receives event and message data and provides the technical interface to the Application Service Interface (which communicates with the console).

ROUTING LAYER

Command Dispatcher	Message Dispatcher

Communications from Kona devices is analyzed and routed to the correct point of action. In turn, commands are processed and forwarded to devices (two-way communications).

DEVICE MANAGER

Federal APD Protocol	OEM Protocol
Universal Logic Module	Wiegand Standard	ISO Barcode Standard	EIA Standard

Supports the protocol for Federal APD products and allows OEM products from strategic business partners to communicate to the central management system.

DLL

IPC

IPC

Trigger

Events

Process Manager
Services all requests for retrieval & storage of data using SQL as its primary language (Sybase SQL, MS SQL, Oracle SQL.)

ODBC Compliant Database Servers (public domain)

ScanNet Tables (relational database)
- G/L Journal
- A/R Reports
- Cash Receipts
- A/R Transactions
- Aged Balance
- Statements
- Invoice
- Card Access Holder
- Account Information
- Parker Activity
- Parker Status
- Parker Exceptions
- Billing
- Maintenance
- Time & Attendance
- Payroll
- Security Management
- Point-of-Sale

Crystal Reports Engine DLL

ScanNet Reports

Application Service Interface

Licensed 3rd Party API's
- Traffic Mgt. Systems
- Valet Parking
- On-Street Parking
- Airport Ground Transportation
- Intelligent Transportation Systems
- Taxi Dispatch
- Toll Systems
- Hotel Parking
- VMS Systems
- LPR Systems
- Security Mgt.
- Vehicle Location
- Citation Mgt.
- and more

Software Developers Kit
Power Users
- ActiveX controls
- DLL call
- Device Mgr. call
- ODBC
- Relational Database
- Database tables
- ScanNet
- Architecture Diagrams
- Help System
- Source
- Class Library for Office Automation

Software Resource Partners

Federal APD has a variety of business arrangements that can be structured for independent software developers to integrate their products into ScanNet. Our software engineers have assembled a Software Developers Kit (SDK) to allow licensed third party developers to extend the core capabilities of the ScanNet System.

Using the SDK, value-added applications can integrate seamlessly into the ScanNet System to create one software suite. The system ensures a consistent look with all plug-in extensions. Federal APD encourages authorized developers to integrate their parking and ground transportation solutions into the open architecture of the ScanNet System. Contact Federal APD today for additional information on how to become a licensed Software Resource Partner.

Software Developer's ScanNet Kit

FEDERAL APD

Management Reports Keep You In Control

Transportation management is a cash business and that means dozens of potential ways for your profitability to leak away. ScanNet management reports provide detailed information on the performance of each facility in the network. You get the big picture, complete with all the current data and statistics allowing you to make management decisions based on timely, accurate information.

By supporting industry standards, such as ActiveX controls, SQL, and ODBC compliant database servers, ScanNet can provide standard or custom designed reports for a comprehensive financial tracking and performance reporting system. The core system provides an integrated reports engine that creates a host of standard reports, including system activity reports, cashier reports, financial reports, count reports, and operation reports. The financial reports provide billing, invoicing, and cash receipts data that results in innovative solutions for your general ledger, cash processing and P & L needs.

ScanNet has the flexibility to adapt to the changing information needs of your organization. If you add the Crystal Reports program to the system, hundreds of customized reports can be created by specifying various combinations of criteria.

The open architecture of the ScanNet System allows you to access the database tables to distribute reports in a variety of formats, including Microsoft Word, Excel, text, HTML, e-mail, or over the Web. By using the ODBC feature of the system, your reports will be more informative and provide a complete profile of your system.
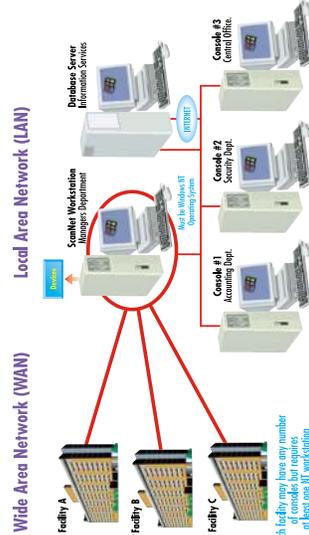
Integrate with:
- G/L Journal
- A/R Reports
- Cash Receipts
- Statements
- Invoicing
- Point-of-sale integration

Networking Solutions

ScanNet is a scaleable PC-based system that provides comprehensive control of all the activities in your facility, while featuring unmatc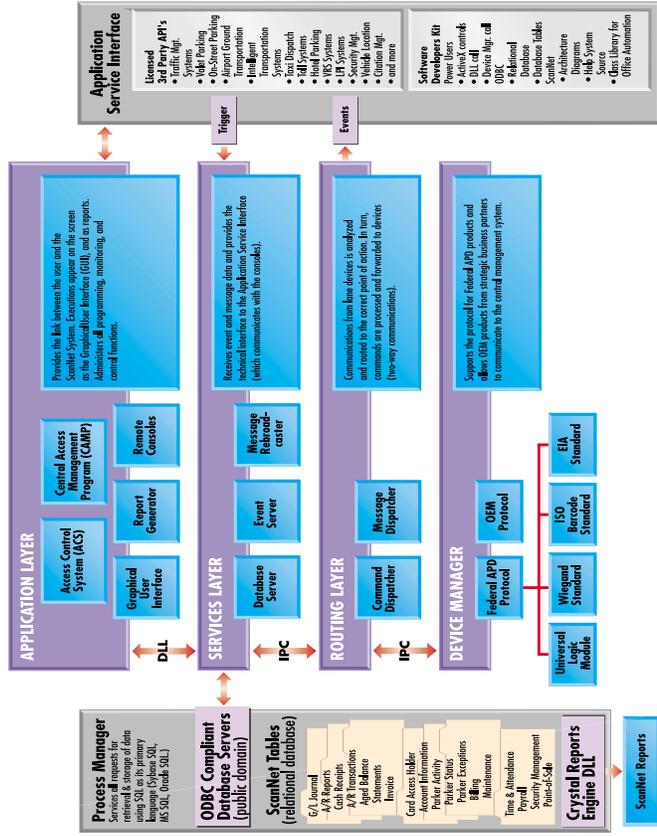hed supervisory checks and balances, and data acquisition. This versatile system is based on client/server architecture and incorporates the latest open system technologies.

The ScanNet System lets you start with a small, single-station solution and expand to an integrated, multi-server environment. The system supports database configurations of a few points, to large, area-wide networks over the Web.

Wide Area Network (WAN)

Facility A
Facility B
Facility C

Each facility may have any number of consoles but requires at least one AT workstation

Local Area Network (LAN)

ScanNet Workstation Manages Department

MacOs Window NT Operating System

Devices

Database Server Information Services

INTERNET

Console #1 Accounting Dept.

Console #2 Security Dept.

Console #3 Central Office.

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