

IMEDGE™
Solutions at work...

*Pre-Authorized Check Flow System (PACflow)
Designed for Aon Corporation*



EDGE
SYSTEMS L.L.C.

About AON...

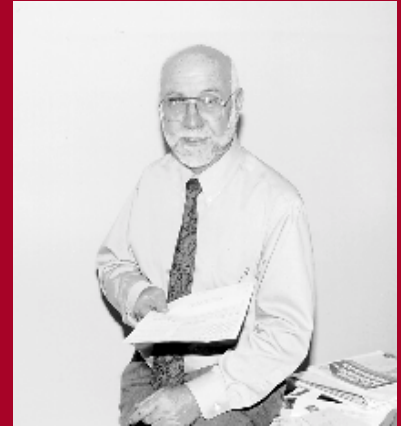


AON CORPORATION IS A WORLDWIDE PROVIDER OF INSURANCE AND CONSULTING SERVICES THROUGH GLOBAL DISTRIBUTION NETWORKS. **A**ON PROVIDES INNOVATIVE RISK MANAGEMENT, INSURANCE SERVICES, AND CONSULTING SOLUTIONS FOR COMMERCIAL AND INDUSTRIAL ENTERPRISES, FINANCIAL INSTITUTIONS, INSURANCE ORGANIZATIONS, MUNICIPALITIES AND INDIVIDUALS. **A**ON'S CONSUMER INSURANCE BUSINESSES UNDERWRITE AND MARKET A VARIETY OF SPECIALIZED INSURANCE AND EXTENDED WARRANTY PRODUCTS, PRINCIPALLY THROUGH SUBSIDIARIES SUCH AS **C**OMBINED INSURANCE OF **A**MERICA, **A**ON WARRANTY GROUP, AND **V**IRGINIA SURETY Co.

Introduction

Aon Corporation's internal business consulting group—Business Systems Planning & Analysis (BSPA)—provides Business Process Analysis, Business Process Re-engineering, and Imaging Systems evaluation and implementation for Aon's subsidiaries. Combined Insurance of America recently presented the BSPA Group with a challenge: The Automatic Payment Authorization process was getting out of hand; over 4000 Authorization Forms per week were pouring in, and the present system wasn't equipped to handle the load.

No stranger to imaging, Aon has long used imaging technology to streamline a variety of processes in their daily business activities. According to Les Adams, Aon Services Corp.'s Director of Business Systems Planning and Analysis, "Aon has been using imaging technology since 1986. Imaging systems were used in underwriting, licensing, and for storage and retrieval needs." In fact an imaging system had been installed to help automate the processing of payment authorizations from Combined Insurance policy holders. According to Adams, "The whole (payment authorization) process was done manually up until about 1991. A Forms Processing system was then put in place but did not provide all the functionality necessary to truly streamline the process. For one thing, data from each form still had to be keyed in manually. In addition we were encountering heavy delays when submitting data to the mainframe, because the operator had to wait upwards of 5 minutes for some data to be accepted. We also felt that we needed some type of workflow functionality built into the system to handle exceptions in a more timely fashion."



"Presently we're processing about 4000 forms per week...we expect to quadruple that in the very near future."

Les Adams, Director of Business Systems Planning and Analysis, Aon Services Corp.

Aon and Edge Systems... A Partnership and Solution

To help them meet the challenges facing them, Aon Services Corp. partnered with Edge Systems to deploy an integrated imaging solution that would meet Aon's present and future needs. After a thorough Business Process Analysis, Aon and Edge agreed that for maximum performance and return on investment, the system had to meet several important criteria, including:

- *Elimination of manual data entry.* Although a Forms Processing system had been implemented, its functionality was limited to basic storage and retrieval. To reap the benefits of true automated processing, it was agreed that an Intelligent Character Recognition (ICR) engine should be added to the mix. ICR capability would provide for the automatic extraction of machine print, hand print, and check box information, as well as MICR line extraction and parsing, thereby eliminating the need for manual data entry.

- *Elimination of CICS response delays.* A major stumbling block for Aon was the delay encountered when submitting data to the IBM mainframe. Depending on traffic, users were waiting as long as 5 minutes per authorization for confirmation of acceptance or rejection. To overcome this trouble spot, an automatic CICS data submission program (dubbed Auto CICS) was developed to submit data to the mainframe automatically without human intervention. The program would run as a background process, thereby eliminating the acceptance delays previously encountered.

- *Automated Workflow Capability.* Under the old system, if data was rejected by CICS, the user would attempt to correct the data and resubmit (more delays) or the authorization would be manually forwarded to a separate research group for resolution. Edge Systems' proposal included the development of an automated workflow solution which would route (either automatically or on an ad-hoc basis) incomplete or rejected authorizations to the proper research group for immediate on-line correction or further research.

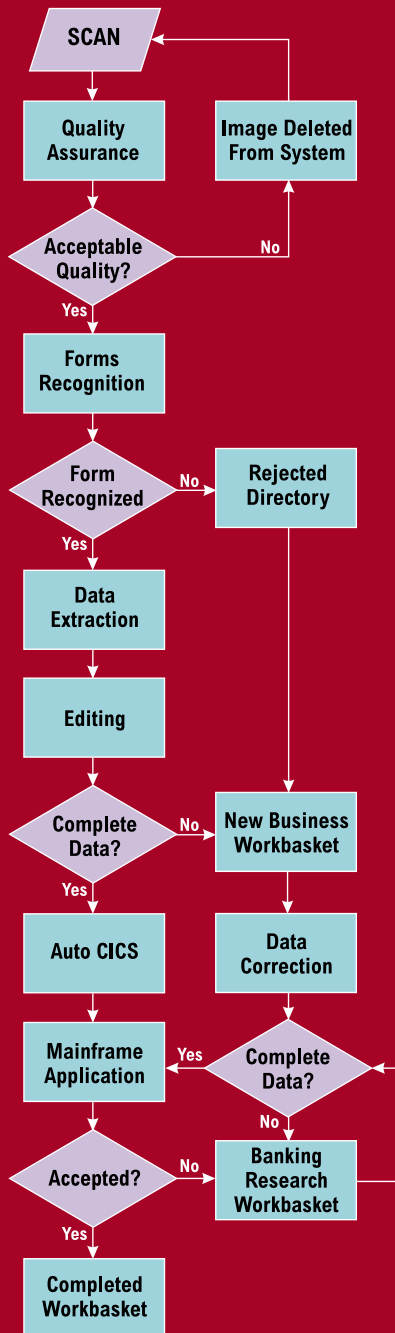
Additional criteria included:

- *Flexibility.* The system had to be adaptable to changing needs as well as integrate seamlessly into Aon's present solution technology.

- *Scalability.* The system must provide the ability to easily accommodate higher transaction volume and enhanced system features, without having to replace the core technology and hardware.

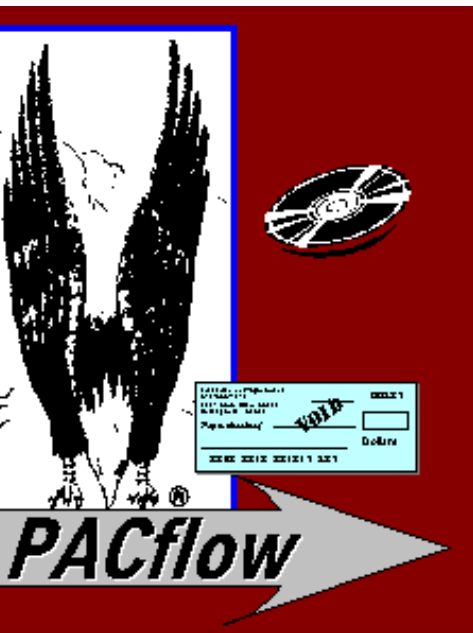
- *Open Systems.* The system must employ industry standard hardware platforms and operating systems.

- *Cost.* The system must be implemented at a reasonable cost.



Edge Systems' thorough Business Process Analysis provided the framework for system development and implementation.

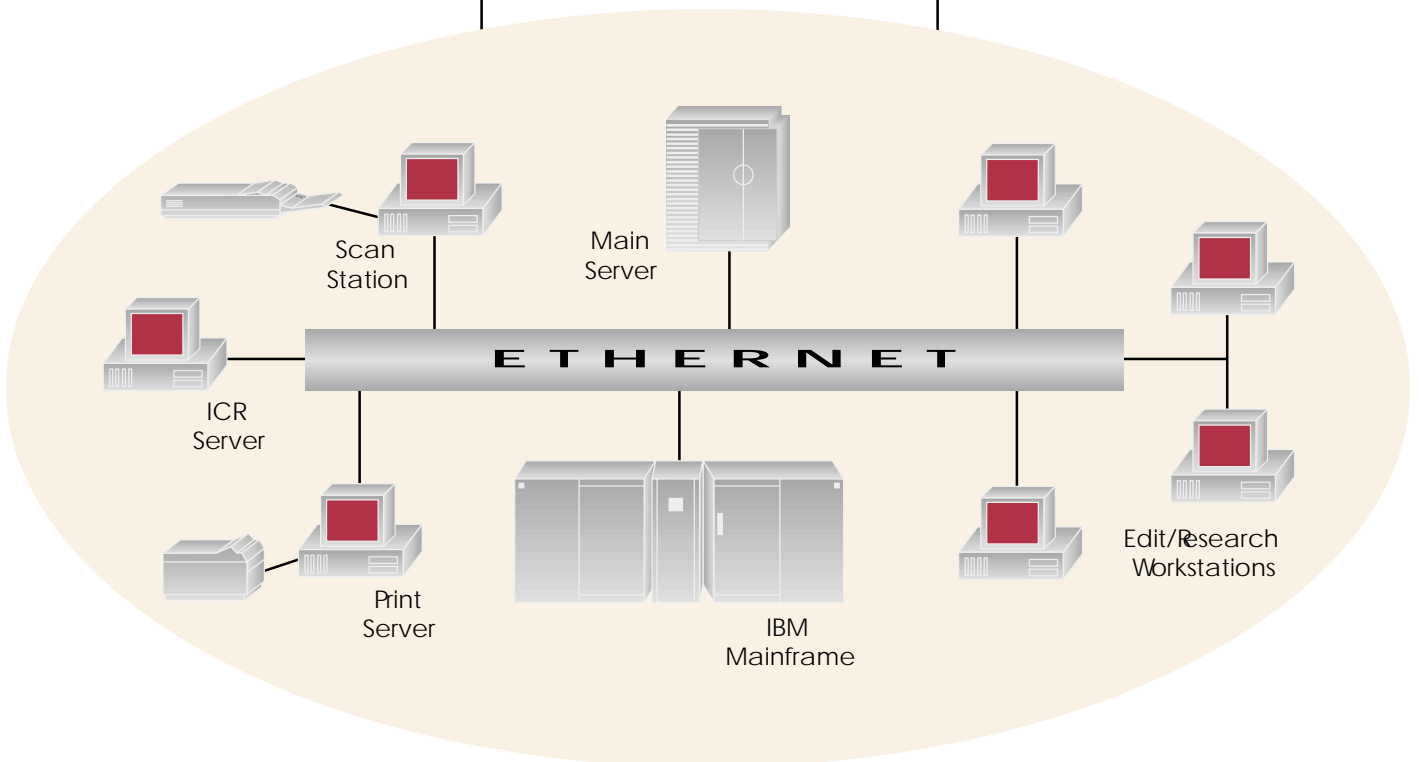
IMEDGE™ IMAGING SOLUTIONS



The PACflow Solution

Edge Systems installed a client-server solution incorporating a powerful UNIX server, multiple Pentium desktop clients running Microsoft Windows, and a high capacity scanner all connected via Ethernet. The system connects to the Aon IBM mainframe via mainframe communication software.

The UNIX Server stores and manages all database and image files, while the Windows clients incorporate Edge Systems' *PACflow* custom user interface, **IMEDGE-OMS** (Object Management System) core technology, and IMEDGE Automated Forms Processing Software.



How PACflow Works...

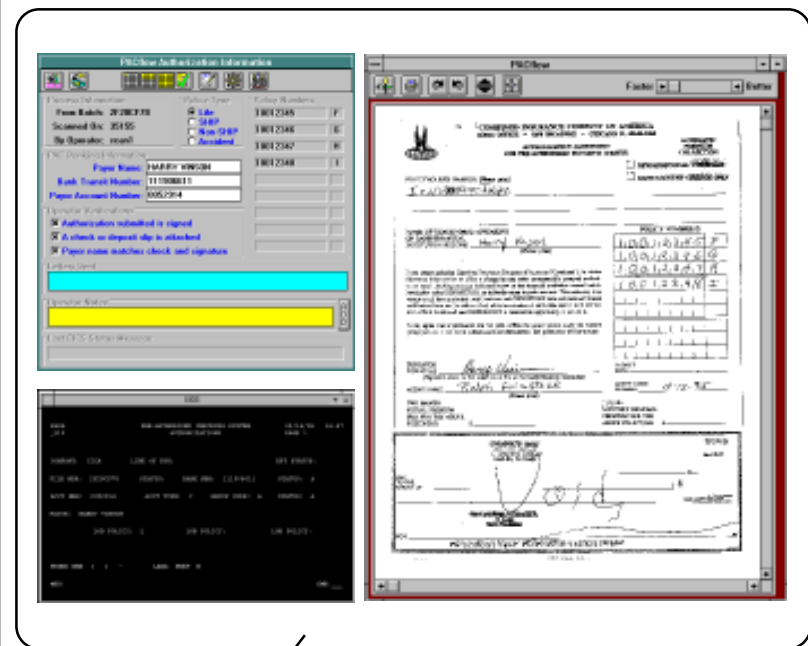
An "Automatic Payment Authorization" form is an agreement that a policyholder signs to allow Combined Insurance to deduct payments directly from a checking or savings account. The 1-page form is completed by a Field Agent whenever a new policy is sold or if changes are being made to an existing policy. Each Field Agent sends the forms to the Aon Home Office on a weekly basis.

Once received by the Home Office, the forms are prepped for scanning (this includes the removal of staples and the attachment of a voided check or deposit slip containing the account information). The forms are then scanned into the system. After a quick quality assurance check, they are submitted to the forms recognition software. The system automatically extracts all pertinent data (both hand- and machine-printed) and passes the image of the form and the extracted data to a number of edit stations where operators verify the integrity of the information. Once verified, the system reviews the data for completeness. If complete, the data is submitted via Auto CICS to the mainframe. If accepted by the mainframe the authorization is considered complete and is sent to the "completed workbasket."

If the data is incomplete or rejected by Auto CICS, *PACflow's* conditional routing capability routes the data to another workbasket based upon the type of discrepancy. For instance, the data may be submitted to a banking research workbasket where immediate on-line corrections or further banking research can be performed to correct the data.

For every authorization, **IMEDGE-OMS** software creates an "Object Handle" which provides system-wide access to the form image, the extracted data, and any pertinent correspondence. All data can be instantly retrieved with a few simple keystrokes.

Presently, an image of the form is stored temporarily on magnetic disk, while the data is stored on the server. After 30 days the image of the form is committed to microfilm per Aon's specification. "The system offers the flexibility to attach optical storage later on if we so desire." Adams said.



Editing and Research Workstations at Aon's Automated Premium Collection Service Center are used to perform QC verification, data correction and research. A typical desktop contains an image of the authorization form on the right, a PACflow authorization screen at the top left and a CICS screen at the bottom left, as shown.



Meeting the challenge...

In addition to addressing the major criteria of automating data entry, eliminating CICS delays, and automating workflow, the *PACflow* system meets several additional needs outlined by Aon:

The Solution is open-systems based. The system uses Windows-based Pentium client workstations, and a UNIX-based server.

The Solution is flexible. Aside from integrating seamlessly with Aon's computer operating environment, the Edge Systems solution accommodated Aon's existing business framework. For example, the forms recognition software was customized to recognize the existing forms used by Aon. This not only eliminated the need to redesign the form, but it provided a familiar look to the operators as well.

The Solution is scalable. The Edge solution employs a powerful server, with more than enough processing power to handle system expansion. It appears that Aon is going to need it—according to Adams, “We expect to quadruple the amount of forms processed in the very near future.”

The Solution is low-cost. Because the solution uses existing equipment and software, where possible, it was provided at a reasonable cost.

In Summary...

When asked to summarize the benefits of the *PACflow* solution, Adams noted, “The system will allow Aon to steadily accommodate an increased volume of work without a significant staff increase. Also, the system gives us excellent control of the whole authorization process—a few keystrokes tells us exactly where an authorization is at any given time.” And this brought to mind one of the system's most important benefits, “Better customer service,” added Adams.

About Edge Systems...

Founded in 1985, Edge Systems embarked on a company mission to become a leader in the office automation industry and a key provider of fully integrated, enterprise-wide workgroup computing solutions. As a privately-held computer reseller, the company quickly established a reputation for quality, integrity and excellence in its products, services and support. Edge Systems today is a full service systems integrator and software developer that uses its diverse technical resources and strategic vendor alliances to offer clients a range of professional services that span network design, systems integration, application development, consulting, training, and customer support.



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