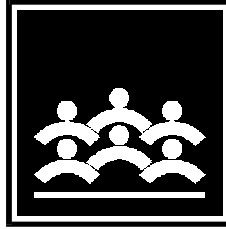


Custom Management Reporting
Knowledge Integration/Warrooms
Implementation Support Resources
Online Documentation & Training



Customized Onsite Training/Seminars
Product/Service Documentation
Performance Analysis & Measurement
Technical & Operations Documentation

Corporate Knowledge

AllTell ACquire Installation and Report Definitions Issues

11/20/2001

Conventional Mainframe Reporting

Most corporations produce their reports from the mainframe to paper, or directly to the screen. The reports may be developed in a report programming application such as RPG or by queries. The application software frequently contains many reports as part of its original installation and implementation. Most corporations may modify these slightly at implementation to match their configuration, then use them until the next software upgrade or implementation. They rarely imagine that anything else is available.

These reports most often are produced on a printer. If five different users need the same report to carry out their functions, they may each get a separate printout or may route a paper report among themselves. See Attachment A as an example of this.

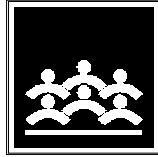
The ACquire Data Warehousing application from AllTell can replace much of the paper and its associated distribution and archiving costs. The ACquire system uses a special "printer" to translate the mainframe print request to a flat text file on a local network server. This file is processed by the ACquire Shrinker which compacts it and stores it on the network for further use. ACquire can define areas on the reports as fields, which can then be used to extract or find specific data. See Attachment B.

ACquire Installation

Assume that AllTell and the client does the hardware and software installation and initial setup. This includes:

- ♦ Selection of ACquire PC.
- ♦ Installation of BarCard into PC (hardware and software).
- ♦ Hookup of BarCard PC to mainframe (hardware and software).
- ♦ Setup of target network directory.
- ♦ Setup ACQUIRE printer on mainframe (software).
- ♦ Mainframe security setup for ACquire developer/user. Includes report, file and query access.
- ♦ Network security setup for ACquire developer/user.
- ♦ Testing mainframe print to network directory function.
- ♦ Testing ACquire on the network.

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- ♦ Making ACQUIRE printer available to user(s).
- ♦ User instructions on redirecting or using the ACQUIRE printer on this mainframe.
- ♦ Installing ACquire on a developer workstation.

This establishes the initial hardware and software systems needed to produce ACquire reports on the network. Anticipate one day (8 hours) overall time for this setup.

Report Definitions

Specifying Reports to be Converted

The client and CKI establish which reports or queries from the mainframe are to be "converted" to run to ACquire. This will be based on:

- ♦ Department
- ♦ Security Access (Mainframe), e.g., can developer/user run the report.
- ♦ Report Frequency
- ♦ Report Distribution
- ♦ Need for archiving report
- ♦ Need or desire for extracting report data to PC-based program, e.g., Access or Excel.

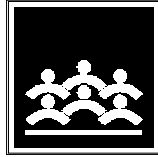
There should be 5 to 10 reports specified to make the "conversion" worthwhile for a CKI effort.

Estimated time: 1 hour over a period of a day; this time span will involve the mainframe operator enabling security access to various files/reports and/or running reports to the ACQUIRE printer.

If a report is produced from a pre-programmed mainframe report, there may be several variations of it, such as summary vs. detail, etc. Each variation must be developed as a separate ACquire report, since the layouts will be different.

If a report comes directly from a mainframe query (based on the mainframe query application), the CKI/Client developer must:

1. Have security access to the query application.
2. Have security access to the mainframe database files.
3. Have familiarity with (or develop it) the query application so it can be modified to extract different/additional information. While this familiarity may be developed later, the developer must gain at least the knowledge to run the desired query, e.g., modify parameters such as the report date.



Defining a Report

On the ACquire workstation, install a text editor, such as Programmers File Editor (PFE) which shows line and column numbers. These are needed to define the report in ACquire.

For each report:

1. Run report via ACQUIRE to network.
2. Define report in ACquire so the ACquire Shrinker recognizes it (uses PFE and ACquire).
3. Shrink data into ACquire.
4. In ACquire, define desired fields on report (so developer can directly reference it).
5. If desired, in ACquire, manipulate/search report based on some field criteria.
6. Rerun from mainframe to ACquire to ensure report processes properly.

Each report will need approximately 3 hours to run, define, and proof. Several reports can be developed concurrently.

Evaluating Reports

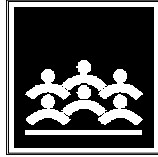
Each ACquire report needs to be evaluated for usability. This is based on the area addressed (such as RMAs, AR, AP), the needed and/or desired information (such as top distributors, aging by distributor, payables by vendor), and various iterations needed (such as several layers of summary and detail). Usually, a report may lack desired information such as levels of detail or tie-ins/reconciliations to other reports or accounts. If the report is usable as-is in ACquire, the development for that report is done.

If further report development is needed, the developer can:

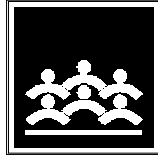
- ♦ Request a programmed report be recoded or enhanced.
- ♦ Request a query be recoded or enhanced.
- ♦ Request a new report or query be developed.
- ♦ Directly create a new query.
- ♦ Directly create a new programmed report.

The first three options require commitment of additional (usually MIS) personnel resources and frequently a long time lag to produce. The last two options are usually much more expedient in terms of both time and additional personnel, but require the developer be (or become) familiar with:

- ♦ The mainframe query or report application.
- ♦ The query or report "language".
- ♦ The mainframe database files, their meanings, the field names and contents and their relationship to other files.



The last item is usually the most difficult, since this information is rarely documented or even known by most client personnel.



Extended Report Development

Frequently, desired reports may not be expediently produced by the mainframe and/or ACquire:

- ♦ The query or report programming language either does not directly support the desired data extraction (such as specific types of joins) or the complexity of the programming is extensive or would need to be done outside the normal report programming application, that is, custom code programming.
- ♦ The development time for a query or report is frequently long.
- ♦ The same data from the mainframe (such as an AP posting file) may be needed in several different formats, arrangements or linkings to other data files. Each of these reports would have to be developed in the mainframe environment.
- ♦ Frequently, several generations of a report may be needed before the needed information and format develops.
- ♦ The number of reports/queries create an unacceptable load on the mainframe.

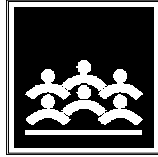
In these cases, it may well be more optimal to extract information either directly from the mainframe or from an ACquire report to an external PC-based database. A third-party report generator, such as Seagate Crystal Reports, can then be used to create reports based on this database. See Attachment C.

Disadvantages:

- ♦ The extraction of data from the mainframe or ACquire into the database is an additional step and may require some time lag based on the size (amount) of data extracted.
- ♦ Additional PC-based applications are required, such as Microsoft Access or SQL Server and Crystal Reports.

Advantages:

- ♦ Once the data is extracted into the database, no further load is placed on the mainframe. This may be a significant factor, especially during some time periods such as end-of-month accounting closes.
- ♦ Further data manipulation may be done inside the database. These manipulations are frequently more easily done (and faster) in the PC-based environment than on the mainframe.
- ♦ An external report generator such as Crystal Reports, can produce ad-hoc reports quite quickly. The developer can then drill down into the information and further refine the report to get the desired results. The turn-around time



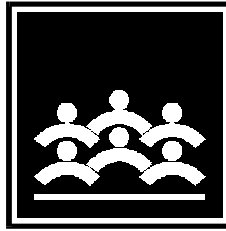
on this type of report development is usually based only on the speed of the PC workstation.

- ♦ Crystal Reports, for example, can easily produce data analysis formatting that is extremely difficult for most mainframe-based program generators, if not beyond their capability. Examples might be Top-N, subreports, complex groupings, and complex output formatting.

The basic principle is that the usability (both speed and cost) of a PC-based reporting system is proportional to the number and complexity of the reports needed. The cost of the third-party software and time needed for extraction may well be significantly less than the cost of the mainframe loading or the cost of upgrading the mainframe system to be able to handle that load.

This further external (from ACquire) development is a separate process from the "standard" reports developed to be used only in ACquire. Each report may require from 1 hour to several days to develop.

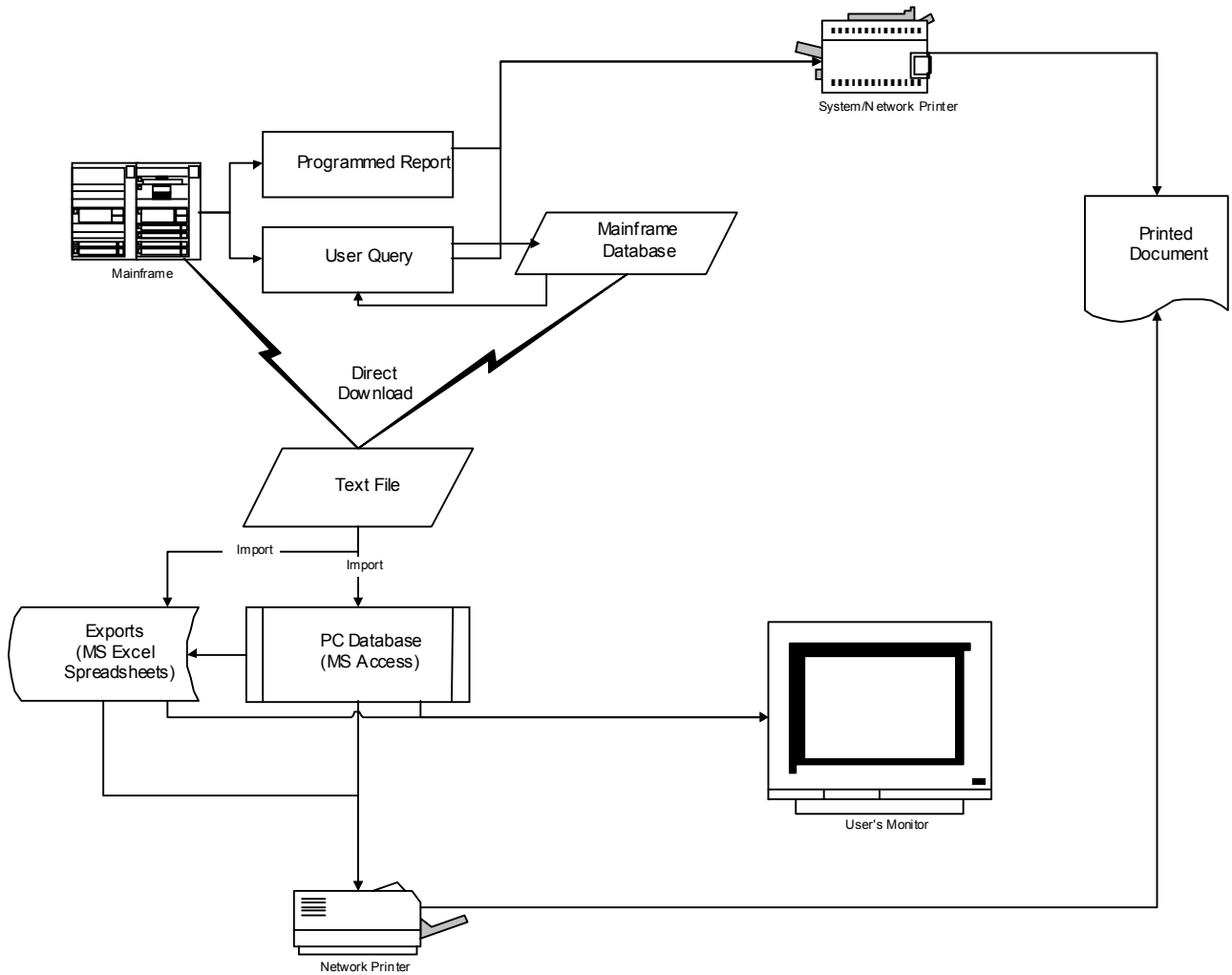
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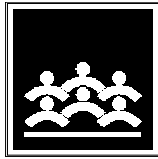


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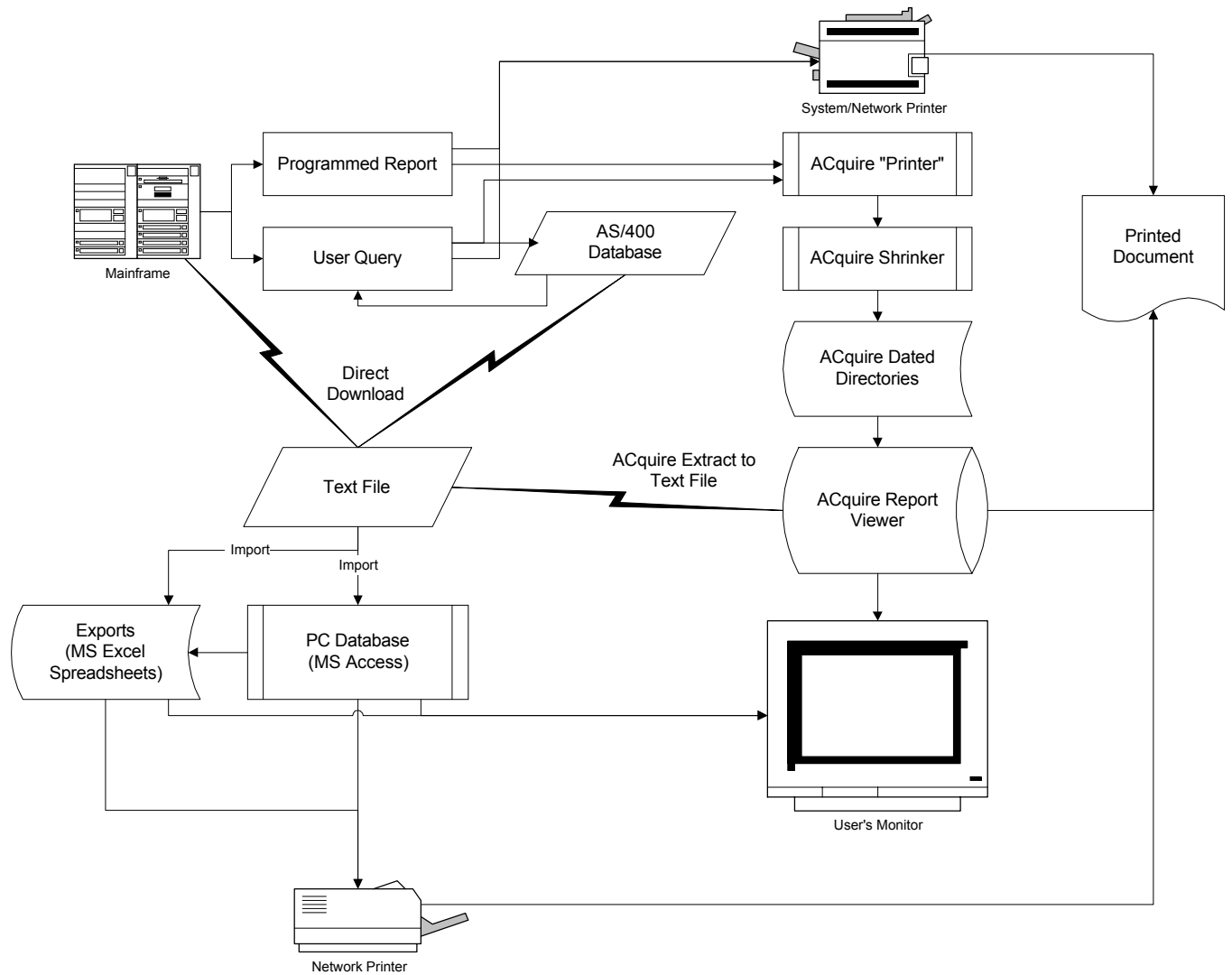
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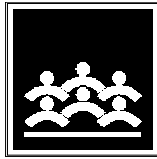
Attachment A. Conventional Mainframe Reports





Attachment B. Reporting with ACquire





Attachment C. Extended Reporting with ACquire and Crystal Reports

