

DRAFT

ebase Installation Tasks/Costs

Larry Bednar
January 18, 2007

Purpose

This document outlines typical expenses associated with customization and installation of ebase V2.xx as a replacement for a preexisting data system. An outline of actual hours spent on several “standard” implementation projects is provided at the end of this document.

Representative Development Tasks

Ebase implementations typically contain unique characteristics that make it difficult to provide a “standard” estimate of expenses. A myriad of different approaches might be selected. Even organizations with very similar information needs may realize very different costs if they choose different approaches to implementing ebase.

Software Installation

Actual installation of ebase V2 is quite inexpensive. Installation of the ebase software alone typical requires only an hour or so of expert time. In some cases the attention of an expert is not needed at all.

An installation of ebase intended for use on a single computer, by only one person at a time, can be used with no additional software purchases required.

The following situations typically require a purchase of additional software to complete the ebase installation:

- Multiple simultaneous users located at several different computers

This situation typically requires the purchase of a copy of FileMaker Server, availability of a computer to be used as a “server” on a computer local area network, and purchase of a copy of Filemaker Pro for each “client” computer where a user is expected to sit during their work with ebase.

- A continuing need to modify ebase reports, layouts, etc

This situation may imply the need to purchase/install a copy of FileMaker Pro to provide access to database modification functions that are not provided with the free version of FileMaker provided with ebase.

Backup System

FileMaker databases in FM V6 format or earlier are susceptible to damage at any time an “awkward” shutdown is experienced during database use. ebase, as a FileMaker application, has the same susceptibility. As a consequence, it is very desirable to have a good, reliable system for “backing up” ebase files. Manual procedures can certainly be used if staff members can be trusted to perform backups regularly. More automated systems employing removable hard drives, tape drives, etc. may be desirable but are also typically more expensive to establish.

If a “manual process” is used, it may be important to be mindful that there is a continuing cost in terms of staff time and attention. If such costs cannot be supported, it may be wise to opt for the increased initial expense of a more automated backup system.

Automated backup systems often employ additional hardware (tape drive, removable hard drive, etc.) and sometimes include additional purchases of specialized software. However, relatively simple backups can be accomplished using the open source “zip_backup” Perl program designed for this purpose by Bednar Consulting – in this case the only expense is a small amount of setup time from the developer and purchase of a copy of WinZip archiving software (approx \$40).

Customizations (Data Storage)

In some cases, an organization determines that a customization is essential for use of ebase. This is not uncommon, but most organizations do not encounter this situation.

The following situations may result in a mandatory customization:

1. A truly essential information item or information area must be stored in a fashion unlike any available within a “standard” copy of ebase.

For example, tracking of detailed information about fundraising events, classes, etc sometimes requires a significant customization compared to a “standard” copy of ebase. Such information may require the inclusion of additional FileMaker files, and an extension of ebase user navigation functions to allow ready access to these additional information areas.

Additional information may be needed to completely characterize payments or other interactions with a contact. In some cases, a standard ebase layout used to access closely related information is within modified to provide to provide access to this additional information

2. The organization may have an essential need for a report that is unlike any of the “standard” reports provided with ebase

Customization of automated reports, or creation of new automated reports is typically complex enough to justify the use of an off-staff expert.

Customizations (Efficiency/Quality)

Most organizations would be able to use ebase productively with no customizations, but decide to fund additional customizations which to improve efficiency or quality of data storage. These customizations are typically oriented towards increasing the efficiency of database use. As such, the expenses of customization might be considered to be “optional”, since the database can be used without them – although at reduced efficiency.

“Code Set” Customization

The set of codes used to classify “log entries” within ebase is very important to efficient use of ebase. It is often possible to use the set of log entry classification codes provided with ebase. However, special needs of the organization are often better attained when this set of codes is customized to include classifications that are of specific interest to the organization.

Several types of code customizations are common

1. Addition of codes to classify an interaction in which an “earmarked” payment is provided (organizations commonly want the code to specifically indicate the program for which the donation is intended)
2. Addition of codes to indicate specific type of volunteer skills
3. Addition of codes to indicate attendance at important organizational “events”
4. Addition of codes to indicate important contact preferences (e.g. “do not solicit”, “no phone calls”, etc)

It is possible for an organization to begin by using ebase's provided, general-purpose code set, while planning later code set additions/revisions. However, development of a customized code set at the start of ebase use can provide advantages:

- Focused work on the ebase code set can result in the development of an approach to creating and defining codes that forms a more coherent “system” for the organization's long-term ebase use. Consistency like this can result in increased ease of use over the long-run.
- Code development decisions are sometimes quite subtle. Approaches that work poorly may be obvious to an experienced developer, but remain unrecognized by a less experienced person. The expense associated with the work of an experienced developer can easily save money in the long run. Also, the interaction of in-house staff with an experienced developer can be an excellent way to educate key members of the organization's staff about these subtleties.
- The initial development of a comprehensive code set may dramatically reduce the need for later additions/revisions.

Ebase SetupDetails

In some cases, it is desirable to create additional user accounts, modify data access privileges associated with ebase user accounts, etc.

Data Transfer

Transformation of data from pre-existing systems into ebase can sometimes require a substantial effort. The following situations commonly cause additional expense:

1. Separation of individual names from “combined” name fields
If the existing system has a single “name” field that contains values such as “Larry and Mary”, “Joe, Hazel, & Joann”, “Mr and Mrs”, “Mr James & Mrs”, “Dr. John and Mrs”, it may take considerable effort to transform these data to forms that can be reliably transferred.
2. Separation of multiple phone numbers from single “phone number” fields
If a single “phone number” field contains multiple entries such as “777-8888 (home), 555-1818 (office, day)”, “cell (Jan) 181.1515, call only if needed”, etc. a substantial effort may be required to transform these data to forms that can be reliably transferred.
3. Separation of phone number “remarks” from “phone number” fields.
4. Movement of information from “remarks” fields to more rigorously managed fields
If “remarks” fields have been used to code standard information about donations, contact preferences, event attendance, etc, it may require a substantial effort to transform these data to forms that facilitate more rigorous data management.

5. Integration of information from several different sources

This situation often results in needs for complex approaches to identifying and eliminating duplicates found in several sources, handling similar data stored in different ways in different data sources, etc.

6. Identification and correction of duplicate records

Identification and correction of duplicates can often be assisted by database automation, but very often requires manual editing by staff members who are familiar with the data.

Database Administration Assistance

It is typical that occasional assistance is desired during the period when the organization's in-house database administrators are still familiarizing themselves with the new database. Even with staff attendance of formal ebase training, it is quite common for unforeseen questions to arise during the first few months of use. As a result, it may be wise to budget for some one-on-one attention from an expert to provide staff training/support in these situations.

Representative Costs

The following table contains actual hours expended on several representative ebase implementation projects that had no unusual difficulties.

<i>Project</i>	<i>Hours</i>	<i>Remarks</i>
COCAAN	77	Includes: 1. major code set customizations 2. one-on-one post-installation user training/assistance 3. relatively easy data transfer 4. approx. 17 hrs spent on code set customization
DCF	80	Includes: 1. major code set customizations 2. one full day of on-site training 3. complex data transfer, with some very substantial difficulties 4. one-on-one post-installation user training/assistance 5. approx 17 hrs spent on code set customization
reSource	128	Includes: 1. major code set customizations 2. 2 full days of on-site training 3. complex data transfer, over 20 separate spreadsheet data sources to be integrated 4. addition/integration of new FileMaker databases to ebase for tracking workshop/class information 5. revision of standard ebase layouts to display additional information provided by data storage customizations 6. creation of user and developer documentation of ebase customizations 7. one-on-one post-installation user training/assistance 8. approx 12 hours spent on code set customization
OutNorth	60	Includes: 1. major code set customizations 2. complex data transfers, some very difficult data situations in pre-existing data systems 3. assistance with client/server set-up 4. one-on-one post-installation user training/assistance 5. estimated 12 hours spent on code set customization