

Database Conversion

Methodology and Processes

Technical Brief

Database Conversion Methodology & Processes Overview

Introduction

White Box enables software companies to successfully manage your customers' data conversion needs and allows you to focus on your core implementation work, while reducing the risks of schedule and budget overruns. By using White Box's services, we can even help turn data conversion into a competitive advantage for selling your solution.

How do we do this? Our services are not just a refinement of traditional conversion methods or the result of "smarter" engineers, but are based on a new, next-generation database technology that is truly unique. Our technology provides greater flexibility in handling data and allows us to compress and accelerate many of the core data conversion processes, allowing you more time to focus on your core implementation work while providing your customers with continuous, high-quality customer service.

Following is an overview of White Box's database conversion services methodology, and how it relates to our partner's processes.

White Box business philosophy

White Box's philosophy is to establish strong partnerships with software vendors/implementers, enabling you to leverage our unique capabilities. White Box provides a full suite of high-quality, cost-effective data conversion services. Our services can be configured to your specific project needs. White Box's PMI-certified project managers follow project management best practices to ensure expectations and deliverables are managed properly throughout the process, giving you confidence that data conversion will not interfere with your implementation. We do not require dramatic changes to your current implementation methodology but will adapt to your current processes when applicable. White Box knows that our success is driven by your success.

White Box integration in overall project

As an integral member of your team, White Box provides value throughout the lifecycle of your project. Figure 1 and the following narrative provide an overview of the integration of White Box with the prime contractor throughout a typical project lifecycle. It also outlines the tasks and deliverables completed by White Box during each of the prime's major phases.

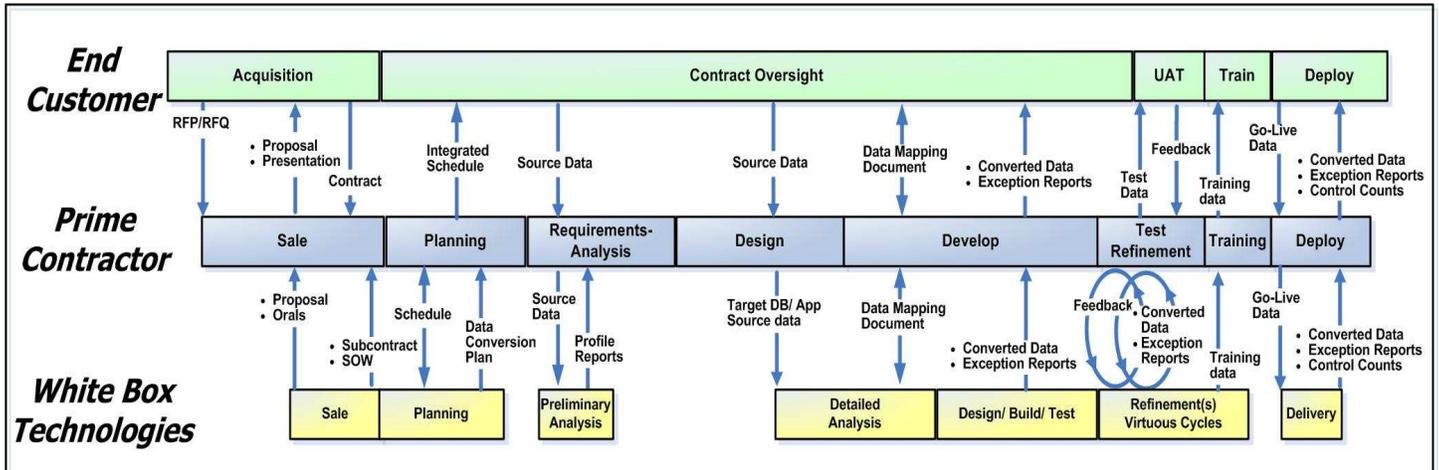


Figure 1 - White Box’s Integration with Overall Project and End Customer

Prime Contractor Sale Phase

While trying to win the business, White Box’s solution provides a valuable differentiator. It enables your team to offer a dynamic, unique and cost-effective solution unlike any competitor. In support of your sales efforts, White Box can provide marketing collateral, demos, proposal responses and pilot projects. Whatever your needs are during the sales process, we will be there to support you.

Prime Contractor Planning Phase

During this phase the parameters and details of the overall project are established. Conversion’s role in each phase is defined. White Box will work with the prime contractor to develop an integrated schedule laying out the tasks and dependencies between conversion and other project areas. In addition, the Data Conversion Plan provides the details of how the conversion will be executed and the roles and responsibilities of all key stakeholders involved with conversion.

Prime Contractor Requirements Analysis Phase

Prime contractors often must complete a thorough analysis of the customer’s requirements to define the detailed specifications for the overall solution. This analysis and resulting requirements set may impact one or more of the following areas: processes, organization, technology, and people. In support of this, White Box can very rapidly complete quantitative and qualitative analysis of the source data and deliver data profile reports. These reports highlight source data anomalies which may impact target system functionality and drive requirements. In addition, these reports may highlight the need for substantial data quality improvement.

Prime Contractor Design Phase

During this phase the prime contractor completes the design of the target application and database. Concurrently with this, White Box develops the data mapping rules which establish a detailed link between source system(s) and the target system(s) at the table and field level. The conversion rules must be detailed, unambiguous, and executable; and will include a description of any data manipulation, filtering, parsing, formatting, etc. required for a successful data conversion. The data

mapping rules are the fundamental design specifications for all other aspects of the data conversion project. In working closely with the prime contractor database/application design team(s), White Box's insight into source data issues can influence the target system design at a stage in the project where impact to cost, schedule, and risk are minimized.

Prime Contractor Development Phase

As the prime contractor works on target system development, White Box is completing our conversion analysis and then designing, building, and testing the conversion. White Box's unique technology allows us to move through these phases much faster than any other alternative. Provided the target system is sufficiently complete and stable, White Box can deliver preliminary converted source data to facilitate the prime's internal testing and development. Visibility into how the customer's data actually functions in the target application as early in the project as possible can greatly reduce technical problems and help manage customer expectations.

Prime Contractor Test Phase

The prime and customer will typically conduct a variety of tests such as unit testing, system integration, performance, and user acceptance. At this phase, it is highly beneficial for the prime and the customer to see source data in the target application to verify that the data and functionality of the target system are according to the expectations and requirements previously set. This is the phase where data-related issues and are most likely to surface. Examples include: conversion requirements may have been misinterpreted; customer realizes critical legacy data is no longer available; the target application is not designed to store or process data in the same way as the legacy application. The result may be a change to the application, data, and/or conversion rules. White Box's flexible technology can respond to these late developments very rapidly, minimizing impact on the overall project schedule.

Prime Contractor Training Phase

Depending on prime contractor processes and customer requirements, training is sometimes best conducted using the customer's own data. Using data familiar to the audience can greatly improve a user's understanding and acceptance of your system and help put your customer at ease adapting to a new system. Due to White Box's ability to implement the conversion so quickly, legacy data is often available in time for end-user training.

Prime Contractor Deployment Phase

At system deployment, White Box delivers the final, or Go-Live, conversion data. This is the last set of source data to be converted and loaded into the production system. White Box creates final conversion control count reports and exception reports after the go-live conversion process. The control count reports provide quantitative analysis of the key data converted. The exception reports provide qualitative analysis such as records with incomplete or invalid data. White Box and the data owner(s) can use such reports to validate that the data received from each source was converted to the target system according to the agreed-upon conversion rules and assist in any desired or necessary post go-live correction.

White Box's impact on the overall project

White Box enables conversion to become a much more integral part of the overall project, bringing value which you may not have expected of a typical conversion contractor. For example:

- Source data analysis at the very outset of the project can reduce risk by identifying data content and anomalies.
- Rapid conversion can deliver fully-converted data to support system testing and end-user training, improving overall system quality and end-user acceptance.
- Dynamic conversion framework enables us to respond to unforeseen and late-breaking issues, minimizing impact to cost, schedule, and project performance.
- A high-quality conversion may increase customer satisfaction and potentially reduce support calls.

Conversion Scope

The scope of each conversion project is unique. However, the following is an example of a baseline conversion scope, along with optional conversion services. Our baseline conversion services include the scope of tasks required to process and successfully load source data into the target database and to facilitate functionality of the target application.

***NOTE:** Any records which do not load during go-live are fully documented and reported to you. Optional conversion services may include any additional data quality improvement or enhancement beyond what is necessary to satisfy the baseline scope.*

Baseline Services

- **Data Conversion:** Transforming data from one database schema to another.
- **Base Data Cleansing:** Transforming data to the extent required so the target application can function and navigate properly.
- **Data Standardization:** Converting accepted data values that represent the same information into a single, unified, recognized, and accepted structure as required by the target system (this doesn't include misspellings). For example, standardization of all source Social Security number data to the target format of xxx-xx-xxx.
- **Data Defaulting:** Based on predefined business rules, assigning a specific and agreed upon value to a field in the target database that is different than the corresponding value in the source database.
- **Data Exception Reports:** Reports that provide qualitative analysis of the source data and identify missing, incorrect, or incorrectly formatted data elements required by the target database or application. If the source data problems are not corrected or defaulted, the target application will be inaccurate, have limited reliability, or in some cases abort operation.
- **Data Profile Reports:** Reports that provide quantitative and qualitative analysis of the source data. For example: date fields that do not conform to an expected date format or the total number of records that meet specified criteria.

Optional Services

- **Additional Mock Conversions:** Re-run of the conversion process if above and beyond those agreed to be within scope.
- **Data Quality Enhancement:** Amending, correcting, removing, or defaulting inaccurate, incomplete, duplicated, or improperly-formatted source data beyond what is required by the target application to function properly.
- **Data Augmentation:** Adding new or derived data necessary or desired in the target system but not available in the source. (Also called data enrichment). This does not include changing the intent of the source data.
- **Data Validation:** Checking source data against any known or third-party database to verify data accuracy. For example, comparing the data against United States Postal Service Delivery Point Validation (USPS-DPV) to verify the post office can deliver mail to a particular address.

Summary

Application vendors choose to work with White Box because data conversion is our expertise—it's what we do every day. We understand the challenges, and we have the technology and expertise to overcome them. When partnering with White Box, you can allocate your internal resources to focus on product development, system implementation, and support, and allow us to handle with ease the portion of the implementation that most dread.

White Box's primary objective as your partner is to minimize your risks and provide you with exceptional service. We will ensure that you receive a timely, high-quality, successful conversion every time.

By leveraging the White Box's services, you do not need to purchase expensive software licenses, learn new tools, or configure and manage conversion products and hardware. Just the services you need, when you need them, on a fixed-price basis.

Find Out More

Are you ready to find out how White Box's services can work for you? Whether you are in the middle of a project in jeopardy from data issues, or you just want to explore our services for future opportunities, we are happy to speak with you. Contact one of our data conversion specialists today at 801-386-5013 and let us show you how we can help.