Step 1 — Draw the High Level Plan

Start the design process with a simple schematic of the pieces of the plan that you know: sources and targets. Keep it very high level, highlighting in one or two pages the data sources and annotating the major challenges that you already know about. Figure 10-1 illustrates what we mean. This schematic is for a fictitious utility company's data warehouse, which is primarily sourced from a 30-year-old COBOL system. If most or all of the data come from a modern relational transaction processing system, the boxes often represent a logical grouping of tables in the transaction system model.

Sources DMR system Customer Geography (COBOL flat file, Meters Period Master Master (MS Access) 2000 fields, (Spreadsheet) (RDBMS) (RDBMS) one row per customer) "Unbucketize" 15,000 Slowly changing from 13 months geogs on demographics in one row How/by whom Old (pre-1972) meter and account maintained?? types are not in the status Meters Group's system Process 750k customers/ There are 73 known meter types day 25M customers -10k new or check changed Missed meter reads, estimated customers/day bills, restatement of bills Labels need cosmetic work! check Customer check Usage Month RI RI Electricity Usage **Targets** Geography Electric Meter Meter read date

Figure 10-1: Example high level data staging plan schematic

This one-pager is a good way to communicate some of the project's complexity to management. It's probably as deep as they — indeed, most people — will want to delve into the ETL system.

As you develop the detailed ETL system specification, this high level view will gather additional details. <u>Figure 10-1</u> deliberately highlights contemporary questions and unresolved issues; this plan should be updated and released frequently. You may want to keep two versions of the diagram: a simple one for communicating with people outside the team and a detailed version for internal documentation.

Step 2 — Choose an ETL Tool

There are a multitude of ETL tools available in the data warehouse marketplace. Most of the major database vendors offer an ETL tool, usually at additional licensing cost. There are also excellent ETL tools available from third party vendors.