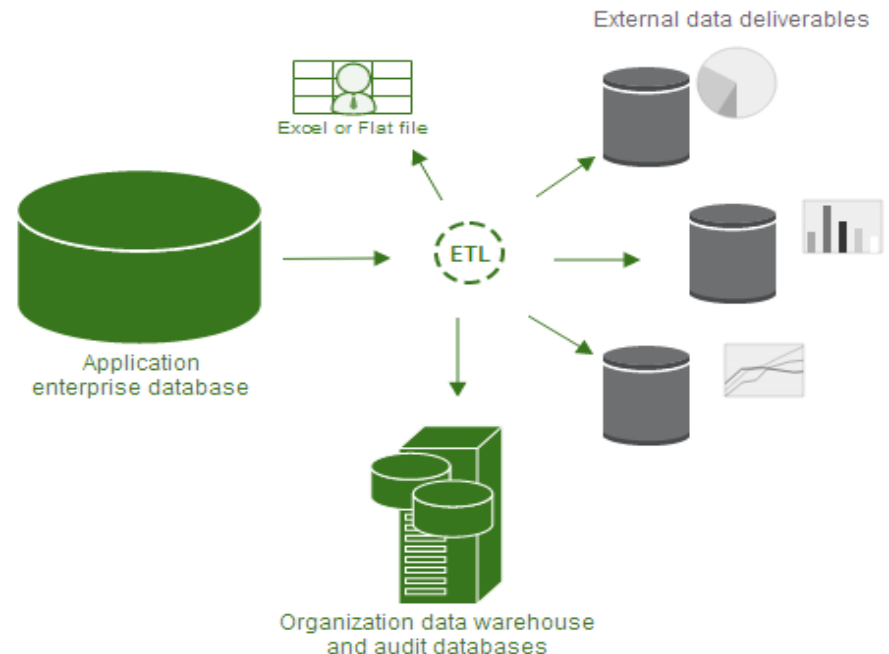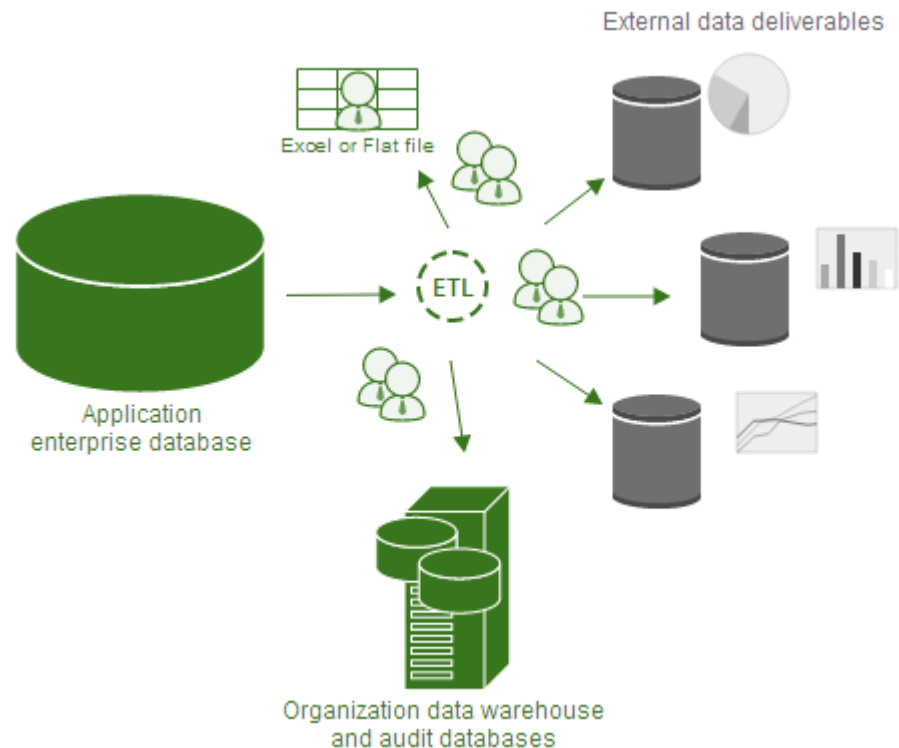# Xtract

Data extraction method and tooling.

Introduction

- Traditional EMR systems transport data to one centralized database in the hospitals.

- This database would have most likely all of the tables which has been in use in the EMR system. It's a challenge to provide subset of the EMR data to internal departments and external organizations.

- Some may need only couple of tables for their reporting and some would need few columns from the table instead of all the columns. Also, the organizational data warehouse would need only those tables, which are needed for their periodic reporting.

External data deliverables

Excel or Flat file

ETL

Application enterprise database

Organization data warehouse and audit databases
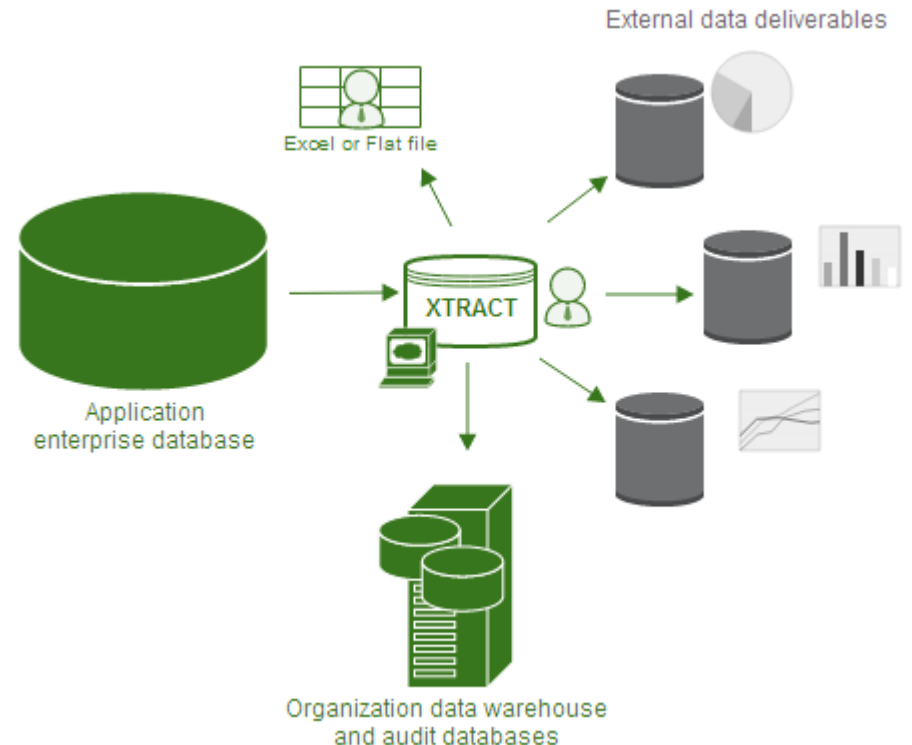
Introduction continued ...

- These challenges are not limited to the health domain but also extends to other sectors.

- Companies hire Data Integrators to custom build ETL extractions, which brings challenges to the organization to administrator ETLs and also in-corporate organizational changes, based on the day-to-day requirements.

External data deliverables

Excel or Flat file

ETL

Application enterprise database

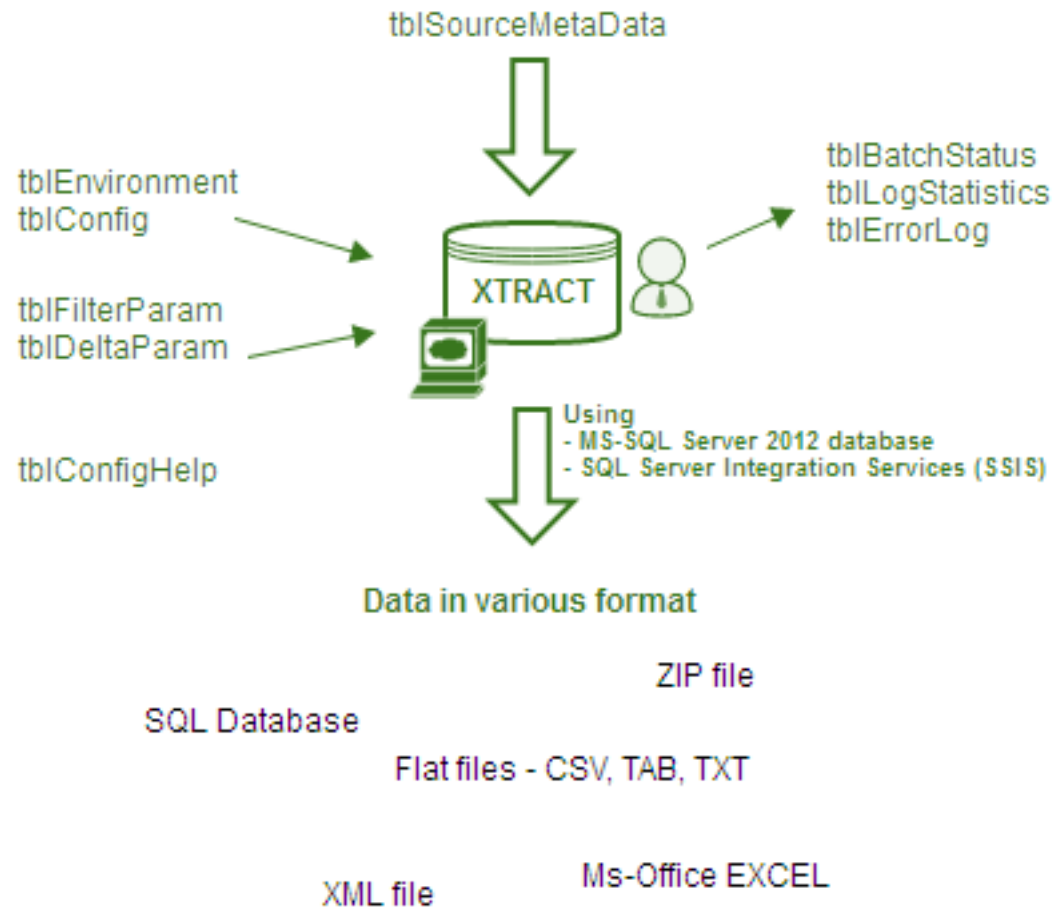Organization data warehouse and audit databases

What is Xtract ?

XTRACT is a data integration solution which delivers robust, cost-effective and quick ETL (Extract Transform Load) builds using smart methods and snippets. The tool allows you to select tables, columns from the source system and create custom SQL views on fly. These SQL views extract only required tables and columns and pushes the data into downstream databases.

XTRACT tool also supplement domain specific, pre-defined datasets which speeds up your data-integration process of your organization.

External data deliverables

Excel or Flat file

XTRACT

Application enterprise database

Organization data warehouse and audit databases

Technology

tblSourceMetaData

tblEnvironment
tblConfig

tblFilterParam
tblDeltaParam

tblConfigHelp

XTRACT

tblBatchStatus
tblLogStatistics
tblErrorLog

Using
- MS-SQL Server 2012 database
- SQL Server Integration Services (SSIS)

Data in various format

ZIP file

SQL Database

Flat files - CSV, TAB, TXT

XML file

Ms-Office EXCEL

• A HLD (high level diagram) showing group of tables, allowing auto generation of views, table scripts and column mappings.

• Repository database holding table configuration, environment, batch & log status, error log, delta-load and data-filter.

Where it can be used ?

- In hospitals, where data is extracted into one centralized database, ex. EMR applications.

- Places where subsets of data needs to be delivered to Internal departments and external organization.

- In sectors, where the data needs to be delivered into downstream databases through automated process.

- Places where enterprise software is used ex. SAP, SIEMENs where point to point data extraction needs to be automated.

- Places where frequent ADHOC datamarts are requested for quick prototyping.

- In a typical data warehousing environment, where multiple data deliverables takes place to the PRE-STAGING database.

- For audit and security department, where data is pulled periodically.

What are its benefits ?

- Xtract automates the data integration layer, where the entire process follows one standardized method of extraction in your organization, thereby creating a long term flexibility in administration.

- Robust, cost-effective and fast delivery.

- Pre-defined market defined datasets - EMR datasets.

- Industry standard outputs ex. MS-SQL tables, ZIP, CSV, XML, MS-EXCEL.

- Connectivity through sFTP.

Setup and licence cost

Setup requirements:

- An ETL Server
- MS SQL SERVER 2012 database engine
- MS SSIS

Licensing:

Yearly licence includes

- Initial setup
- Indefinite ETL environments
- Support
- 40 hours development coupons (recurring on yearly bases)
- Onsite training (2 days)
- Advise on ETL platforms

Xtract tool

Data-Integration at its simplicity

"I don't have time to see any crazy salesman; I have a battle to fight."