

makeplain™

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## **Makeplain's Fraud Appliance**

Overview

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return on intelligence™

- A “pre-packaged” solution (HW/SW/Applications) which provides SIU investigators a case management interface and reporting tools to review suspicious claims automatically identified through advanced analytics and make adjudication recommendations
- Claim alerts are generated daily or near real-time
- Objective is to eliminate fraud before claims are paid out (i.e. prepayment focus)



1. Extract Claims Data on a daily or real-time basis



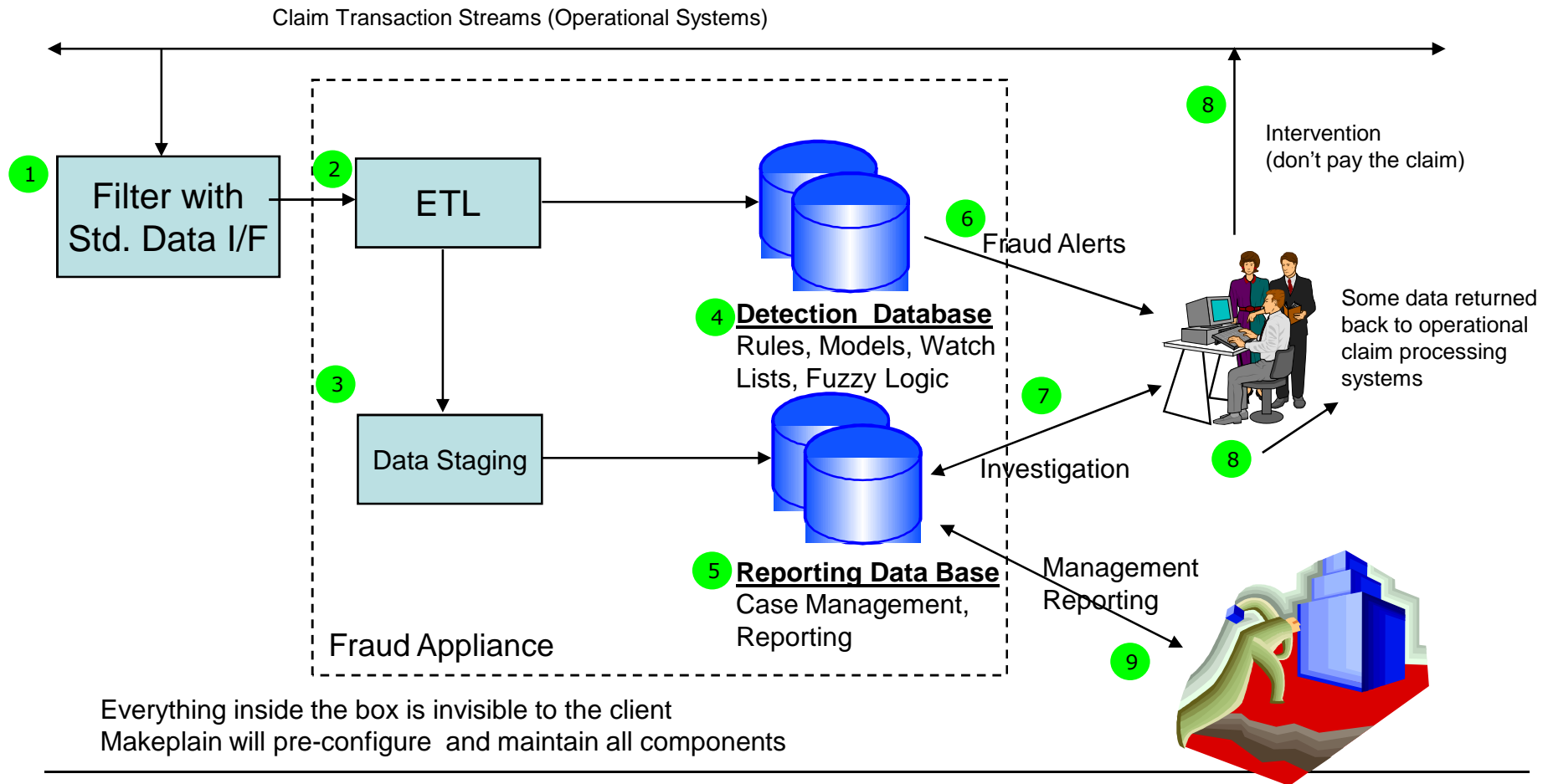
2. Use makeplain™ analytic appliance to detect fraud



3. Use makeplain™ Case management and analytic reporting and visualization tools to support the claim investigation process.



4. You pay out less claims. You will reduce fraudulent claim payments by >50%.



### 1. Standard Data Interface

- A logical data input specification consisting of desired input files/tables and desired input columns for each file/table
- A transport mechanism to retrieve or receive the data

### 2. ETL programs

- A physical data input specification which maps the logical input specs to specific file/table column layout and data type specs
- Transformation and load logic to populate a data staging area
- Transformation and load logic to populate a standard analytic file
- Transformation and load logic to move data from the staging area to the reporting data mart

### 3. Data Staging Area

- A normalized data model to store the complete history of input data for a specified period of time
- Logical and Physical Data Model
- DDL scripts to implement the database
- A physical Database

4. Analytic Database ("in decision time")
- A flattened data structure to support required advanced data analysis (statistical modeling, machine learning, audio analysis, identity resolution)
  - Models weights are updated
  - Models are applied and decision support scoring metrics delivered to a reporting database

### 5. Reporting Database

- A data mart which provides
  - decision support reporting to augment decision support metrics
  - management reporting to track system performance
  - decision tracking to allow closed-loop analysis of decision performance

### 6. Decision Support Metrics

- Reports and indicators integrated into a clients operational process which are actionable and must be actioned

### 7. Investigation

- Decision makers can confirm the required action by calling up reports to provide analytical reporting on scored entities and recommended decisions

### 8. Operational intervention

- Improved decisions are executed in the operational process
- Some data is returned to the operational system
- All decisions should be tracked in the decision support interface

### 9. Management reporting

- Tracking system performance over time

- IBM C-Class Balanced Data Warehouse
  - IBM Information Server
    - ETL and Data Models
  - IBM Cognos
    - Reporting
  - IBM DB2 Intelligent Miner and SAS Enterprise Miner
    - Analytics
  - IBM Entity Analytics System
    - Identity and relationship resolution
  - Makeplain Software
    - Fuzzy logic analytics, anomaly detection, rules engine
    - ETL code, pre-built data models, data mining automation, data mining models, reports
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