

## Clementine Server

A data mining software for business solution



## What is Clementine Server

**Clementine Server is a large scale, distributed Data mining software package with**

- ♦ fast and scalable performance,
- ♦ user-friendly visual workflow interface,
- ♦ powerful analytical techniques.

## Brief Introduction to Clementine

History of Clementine Series:

- Clementine Series was initiated by Integral Solutions Ltd in 1994.
- SPSS took over ISL in 1998.
- SPSS introduced the latest version - Clementine Server 5.1 with distributed architecture in earlier 1999.

Old version vs New version:

Stand-alone application architecture  
vs  
Distributed architecture

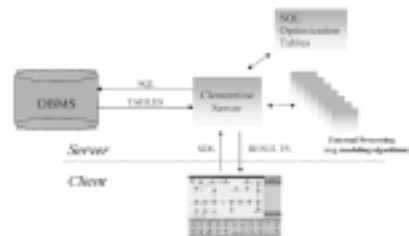
## Architecture

Stand-alone application architecture



## Architecture

Distributed Architecture



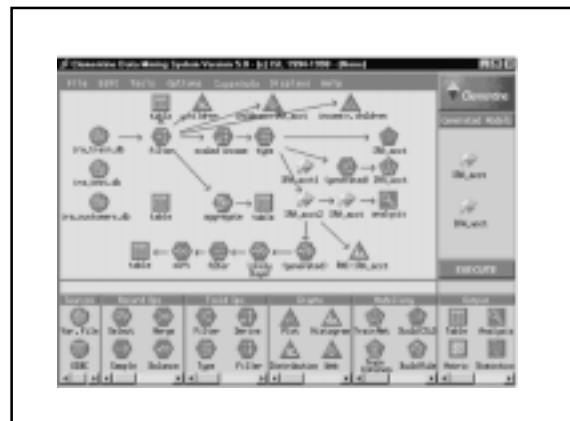
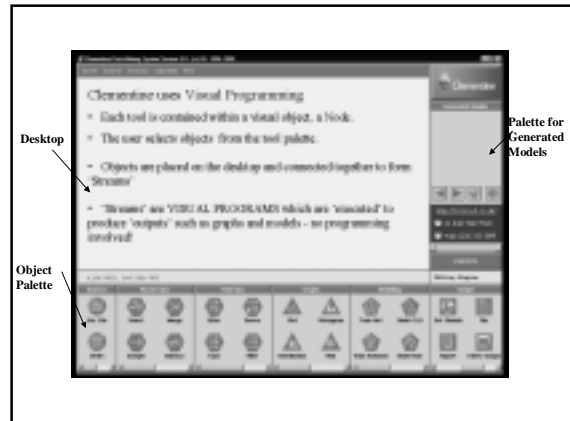
## Capabilities

- ♦ Fast and scalable Performance with Distributed Architecture

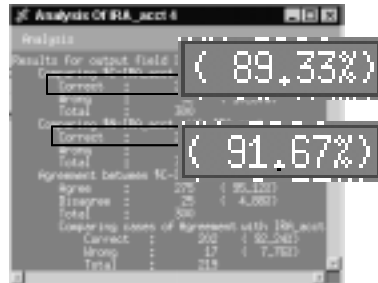


## Capabilities

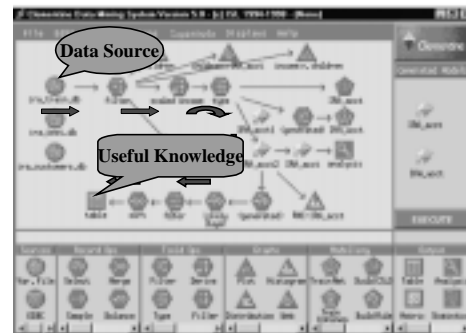
- ♦ Interactive and efficient mining process with Visual Workflow Interface
- **Visual Programming**
  - Enables non-technical users to solve business problems.
- **Easy & Intuitive desktop**
  - Allows rapid experimentation, and creative development of models.



Clementine will report the predicted accuracy of the two used algorithms: neural network and rule induction.



The target data will run through the model to produce knowledge



## Capabilities

♦ Multiple model building techniques:

- Rule Induction
- Graph
- Clustering
- Association Rules
- Linear Regression
- Neural Networks

## Functionalities

- Classification
  - Rule Induction, neural Networks
- Association
  - Rule Induction, Apriori
- Clustering
  - Kohonen Networks, Rule Induction
- Sequence
  - Rule Induction, Neural Networks, Linear Regression
- Prediction
  - Rule Induction, Neural Networks

## Applications

- Predict market share
- Detect possible fraud
- Locate new retail sites
- Assess financial risk
- Analyze demographic trends and patterns

## Limitation

- Clementine does not have effective incremental methods to update mining results.
- Clementine does not support certain data sources i.e. Dbase, Foxpro.

## Summary

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- Clementine Server
  - ◆ Fast and scalable performance on large datasets
    - unique distributed architecture
  - ◆ Rapid and creative development of models
    - user-friendly visual workflow interface
  - ◆ Multiple applications
    - various modeling techniques

## Clementine Study Group

- Peng Wang
- Chong Zhang
- Hang Cui