MIMOS Data Cleansing and Migration Tool (Mi-Morphe)

Business intelligence is crucial in enterprises and governments as they seek to improve on service delivery efficiencies which largely involves data processing and analysis. Clean and standardised data is key before any processing can be carried out. MIMOS Mi-Morphe performs cleansing and transformation on data ensuring accurate outcomes.

Overview

MIMOS Mi-Morphe is an intelligent enterprise application integration (IEAI) tool. It performs transformation and cleansing of unclean data (mostly due to human error) thereby ensuring resultant clean data which is then stored for future use or processed further in the next levels.

Features

Mi-Morphe offers the following features:

- **Data Transformation into Standard Format**
  Data transformation and validation are carried out via ETL methodology whereby unclean data such as string, Boolean and more is first extracted, transformed into the target format and the clean data loaded into a database. Data such as CSV, MySQL and Oracle files are accepted for cleansing.

- **Data Cleansing to Remove Errors**
  Mi-Morphe cleans data by detecting erroneous data and removing missing/undefined or duplicate data from an input file and then outputting a file with usable fields suitable for further processing.

- **Management of Cleansed/Transformed Data**
  Mi-Morphe allows the defining of rules and editing, and provides a detailed listing of processes involving pre- and post-cleaning/transformation data.

- **Cloud, Multi-Core and GPU Ready**
  Mi-Morphe is ready to be run on a cloud environment, is able to exploit multi-core architecture, and utilises GPU hardware for computational acceleration (refer to Mi-AccLib for GPU accelerator libraries and hardware requirements).

Technology Benefits

The main impacts of Mi-Morphe are:

- **Clean and Reliable Data for Any Use**
  Mi-Morphe effectively cleans and standardises data, where human errors during data entry commonly occur. This assures enterprises that their records are always consistent and reliable.

- **More Efficient Data Processing**
  With Mi-Morphe cleaning and transforming data, the clean data which is a direct result of this, can be used as is (without incurring resources to manually check and correct errors) for statistical analysis.

Technology Summary

Mi-Morphe
An IEAI data cleansing and migration tool for business intelligence.

**Industries:** Enterprise, Government

**Features**
- Data transformation into standard format
- Data cleansing to remove errors
- Management of cleansed/transformed data
- Cloud, multi-core and GPU ready

**Technology Benefits**
- Clean and reliable data for any use
- More efficient data processing

System Requirements

<table>
<thead>
<tr>
<th>Mi-Morphe</th>
<th>Hardware Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>Intel® Xeon® 3.16GHz</td>
</tr>
<tr>
<td>Memory</td>
<td>Minimum 16GB of memory</td>
</tr>
<tr>
<td>Disk Storage</td>
<td>Minimum 80GB of hard disk space</td>
</tr>
</tbody>
</table>

**Software Requirements (Linux)**

- Operating System: Linux® (64-bit)
- Tools: Java™ Development Kit (JDK™) version 6.0 and above
- Application Server: JBoss® AS 7.1.1