

# MonkeyProof – Data Dictionary Manager 2.0

... understand, manage and trust your data.

## Introduction



The file-based Data Dictionary Manager (DDM) is a central data store hosting the configurations of your software projects. DDM carries your data through the development cycle, from model design to software development and deployment to your targets. Its main objectives are to let you understand, manage and trust your data.

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# **Key features**

- Standalone, cross-platform (Windows, Linux)
- File based dictionary, XML format
- Migration support services available
- Works with multiple dictionaries in parallel
- Supports inclusion of reference dictionaries
- Integrated SVN and Git version control
- Extensive dictionary preload validation
- Customizable and reusable dictionary view

- Export dictionaries to any text format
- Create Word, Excel, PDF reports
- Supports command-line operation
- Flexible data model, highly customizable dictionaries
- Role based access control
- Supports fixed-point data types
- Supports graphical inspection of array values
- Allows linking of data items to your requirements



Data Dictionary Manager: Core Objectives, Key Capabilities and Business Environment



### **Smart Datamodel**

The datamodel lets you tailor your custom data definitions and facilitates migration of your existing (legacy) dictionaries.

You can separate configurations from your blueprints, enabling reuse across models and software projects. The user interface allows you to graphically inspect array data and to create personal and reusable views.



#### Figure 1: DDM Data Model overview

To govern consistency, checks can be implemented at dictionary and data item level. When required, you can create dependencies between data item attributes. MATLAB/Octave syntax formulas and regular expressions are supported as value definitions. Fixed-point datatypes are supported, as are merge or union data structures.



Figure 2: Sample checks, attribute linking & using formulas

# **Open Data Dictionary**

Easy workflow integration is ensured by the DDM API and the open nature of the XML based dictionaries, in conjunction with template-based export facilities. In addition, migration services are available and you can create PDF (and other) reports of your dictionaries.

# **Version Control**

Integrated Git and Subversion facilities let you safely track, commit and check your work in two of the most widely used version control tools, from within DDM.

#### **Reference Data**

DDM lets you include reference data into your dictionaries. Referenced dictionaries are datasets that (pre)exist in your organization, but are inherently important to your project. You can open referenced dictionaries alongside your project, and work on them simultaneously.

#### **Data Grouping**

In DDM, you can label and group your data. Labeling is for example used to define a set of parameters that are linked to a specific setting or feature in your software. It helps you organizing your data items and to ensure proper overview of dictionary contents.

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Figure 3: Organizing / labeling data items

# **Data Validation**

DDM features extensive validation functionality: any user modification is checked. Loading dictionaries automatically invokes Schema Definition checks (XSD) followed by more rigorous content validations. In addition: DDM will detect and validate modifications of the dictionary XML files. On top of that you can your own checks.

#### **Access Control**

By organizing data items into groups, you can set ownership and permissions. This is of particular importance for collaborative development work where teams and/or individuals need to be assigned read-only or read/write access for development, review, or useonly purposes.

# **Requirement Linking**

You can link your requirements to individual data items, keeping specifications traceable.

# System Requirements

DDM is a standalone application, for Windows and Linux.

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