



## DeltaV Bulk Edit

---

This document outlines the user-defined import/export capabilities in the DeltaV system.

© Emerson Process Management 1996—2007 All rights reserved.

DeltaV, the DeltaV design, SureService, the SureService design, SureNet, the SureNet design, and PlantWeb are marks of one of the Emerson Process Management group of companies. All other marks are property of their respective owners. The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the design or specification of such products at any time without notice.





## Contents

|  |    |
|--|----|
| Introduction .....                     | 4  |
| Bulk Import/Export .....               | 4  |
| Bulk Editing in Excel .....            | 7  |
| Bulk Editing in an ODBC database ..... | 8  |
| Items Supported by Bulk Edit .....     | 10 |



## Figures

|  |   |
|--|---|
| Figure 1—Launch menus for user-defined bulk editing. | 4 |
| Figure 2—Launch point for format file editing        | 5 |
| Figure 3—Format file creation                        | 5 |
| Figure 4—Format file for a control module            | 6 |
| Figure 5—Bulk editing in Excel                       | 7 |
| Figure 6—Bulk importing from an ODBC data source     | 8 |
| Figure 7—Bulk editing in an ODBC database            | 9 |



## Introduction

User-defined import/export (Bulk Edit) may be used to speed up the configuration of database objects that are normally created in large quantities. These are items such as I/O cards, field devices, control modules, etc. Using Bulk Edit helps to make the more tedious aspects of the configuration process more efficient.

The bulk data is transferred into or out of the database via the the user-defined import/export interfaces. The menus to drive these interfaces are accessed from the DeltaV Explorer.

Bulk data format can be either a TAB delimited text file or an ODBC data source.

## Bulk Import/Export

These operations are launched from the “**File -> Import/Export -> User Defined Format**” menus in DeltaV Explorer (Fig.1).

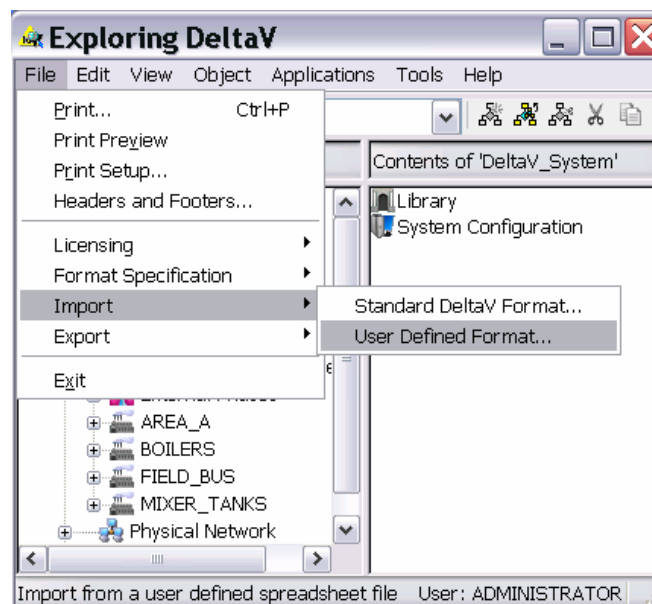


Figure 1—Launch menu for user-defined import.

The user-defined import/export menus differ from the standard DeltaV import/export in that they allow control over the data fields. Specifying the data fields is done via format specification files (\*.FMT). Format files for the most common import/export operations are supplied with DeltaV. These files are located in the “**...\DeltaVDataBulkEdit**” folder.

Additional format files may be created from the “**File -> Format Specification**” menu in the Explorer (Fig.2).

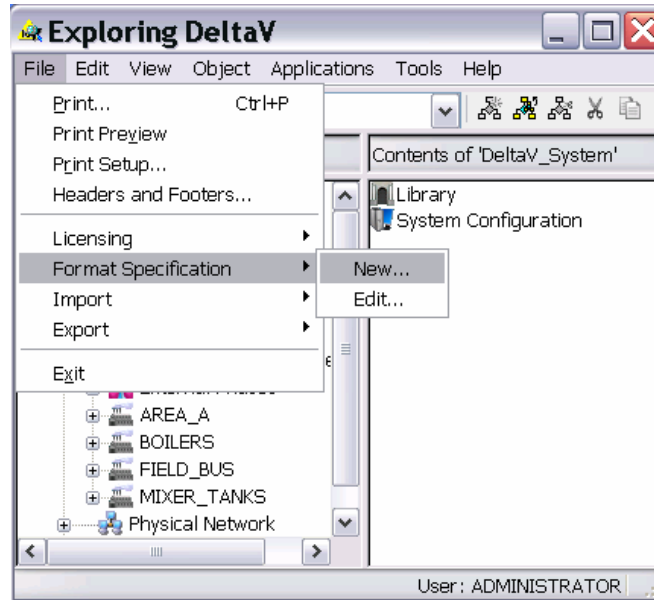


Figure 2—Launch point for format file editing

The format file defines the data fields (and their order) that are exported or the fields that the import should expect to find in the import data source. For example, the creation of an I/O card requires the definition of the “**card\_type**”, “**card\_slot**” and “**ctrlr**” fields among others. The format file would contain only the data fields that one wanted to edit. The format files may be built in advance of or during the import/export. One can create new format files or modify one of the system supplied. There are system supplied format files for common configuration items like “**Cards**”, “**Channels**”, “**Control Modules**”, “**Fieldbus devices**” and more.

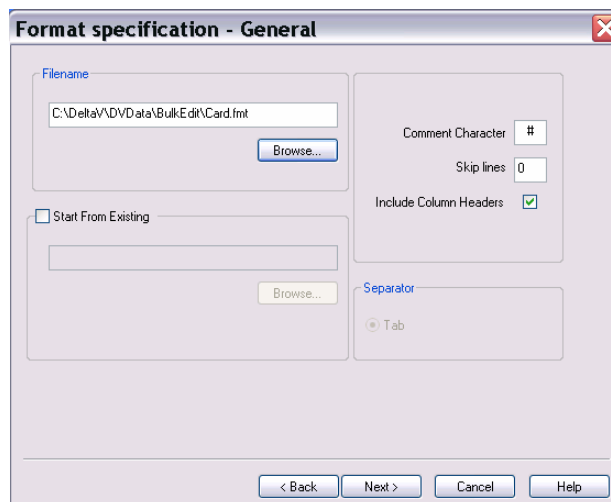


Figure 3—Format file creation

Figure 4 shows the format file being created for bulk editing a control module. Note the field called 'Subtype'. This field is used to identify the name of the template in the library on which the structure of the module should be based. There must be a module template name with a matching 'Subtype' for the import/export to work correctly.

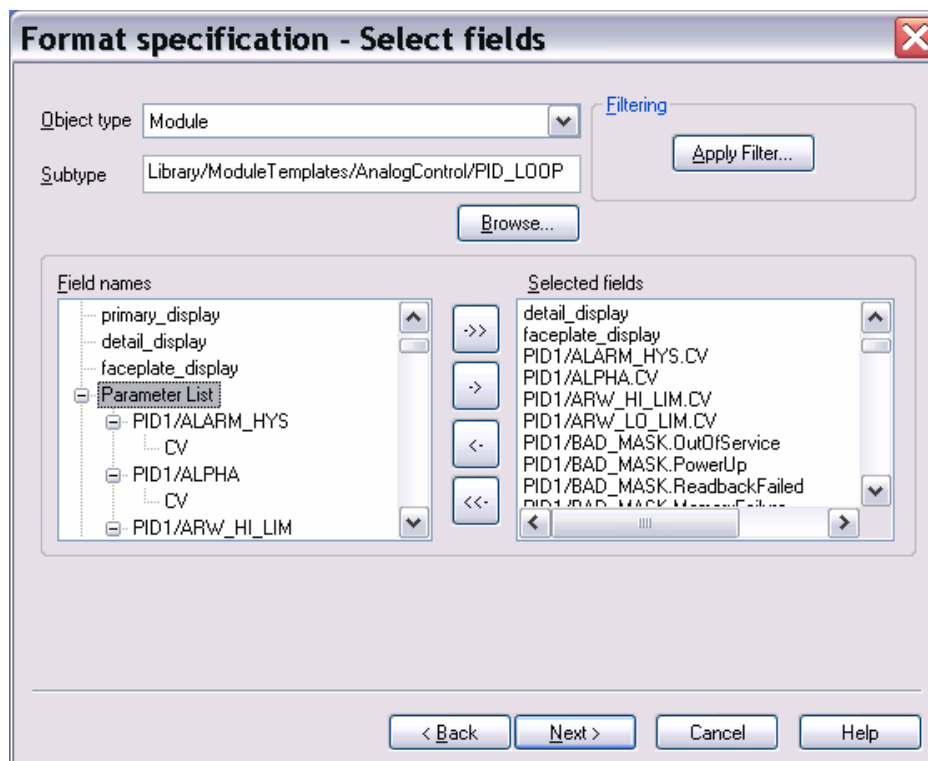


Figure 4—Format file for a control module

## Bulk Editing in Excel

When using Excel to perform the bulk editing, the data is exchanged by means of TAB delimited, UNICODE text files. These text files may be edited using a special Excel template (provided with the DeltaV software) or in a text editor that recognizes UNICODE.

The Excel template (...\\DeltaV\\DVDData\\BulkEdit\\BulkEditTemplate.xlt) is used to edit bulk data that is stored in the text files. The template introduces a “**Bulk Edit**” toolbar (Fig. 5) into Excel. When opening and saving data files in Excel, the Bulk Edit toolbar must be used. Do not use the Excel “**File->Open**” or “**File->Save**” menus. The “**Bulk Edit -> File Open**” menu converts the UNICODE text to ASCII text before reading it into Excel. The bulk edit toolbar also provides a ‘drop-down’ selection list for the different types of DeltaV objects, such as I/O card types, I/O channel types, etc.

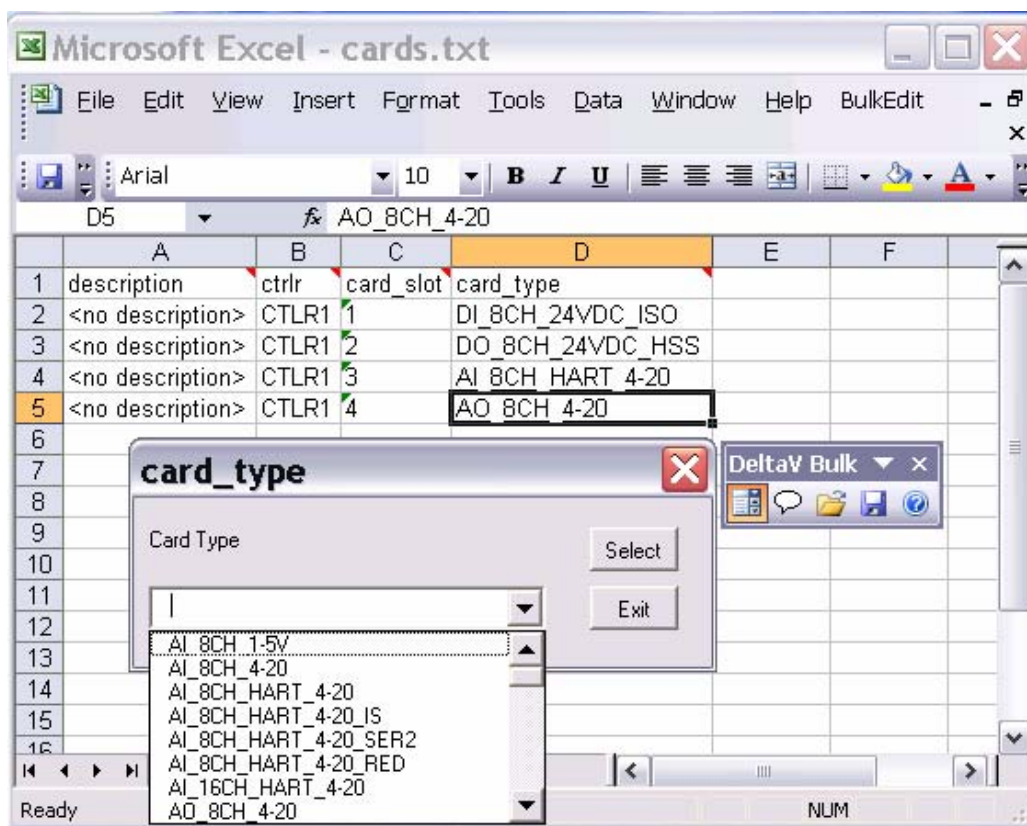


Figure 5—Bulk editing in Excel

From this template, one can modify exported data files or create new files. New files may be created by opening and modifying the example text files. These example files contain exported data that corresponds to the various predefined format specifications that are supplied with the DeltaV software. The template contains

comprehensive help and tips on defining the various database objects. For the template to function correctly, Excel 97 or later is required.

## Bulk Editing in an ODBC database

Bulk edit also supports an ODBC interface to other databases. In this case there is no intermediate data file. The data is transferred directly to/from the DeltaV configuration database.

Instead of choosing to import/export from the 'Date File' choose 'ODBC Data Source' instead (Fig. 6)

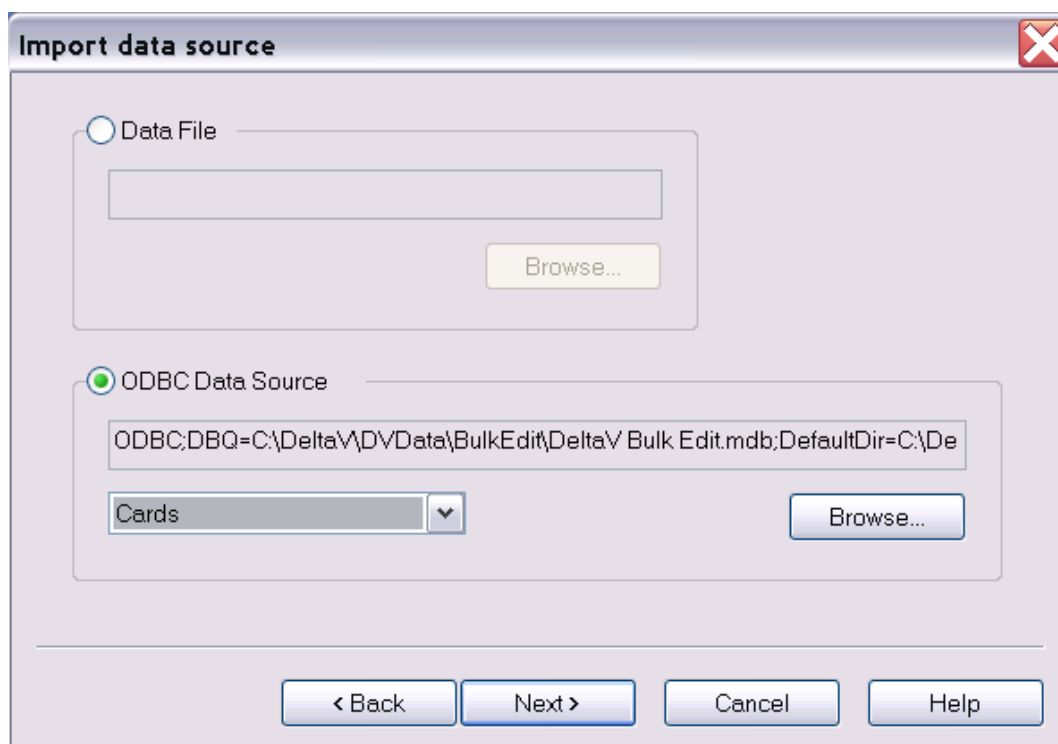


Figure 6—Bulk importing from an ODBC data source

For the transfer to/from the ODBC database to work correctly, the data table in the ODBC database must exist in advance. The structure of this table must match the fields defined in the format specification file. The order and names of the columns in the ODBC database table must match the column headers in the format file text. Figure 7 shows an example of I/O cards being edited in an Access database.

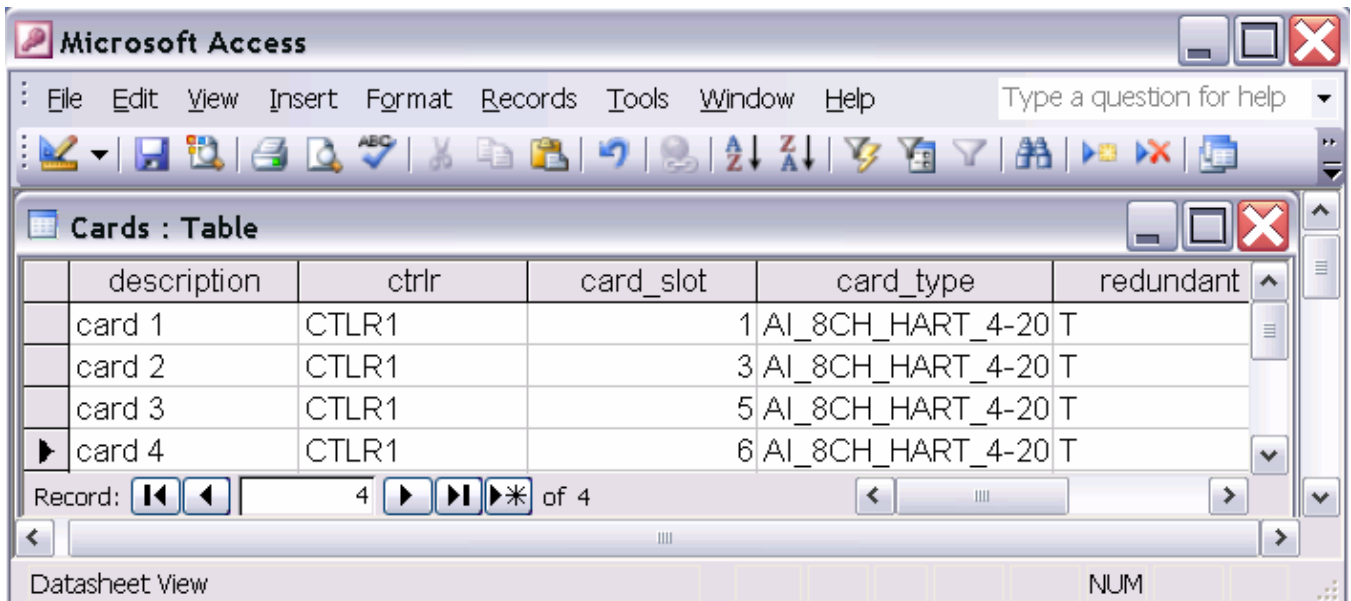


Figure 7—Bulk editing in an ODBC database

Ensure that the records in the database table are properly maintained, since multiple exports of the same object will create separate records in the ODBC database. Bulk edit does not check for duplicate records.



## Items Supported by Bulk Edit

The items currently supported by the bulk import/export utility are :

- ASi bus IO – Ports, Devices, Discrete IO
- DeviceNet – Ports, Devices, Signals
- Foundation Fieldbus IO – Ports and Devices
- Profibus IO – Ports, Devices, Slots, Signals
- Programmable Serial IO – Ports and Datasets
- Remote I/O Cards and Channels
- Serial IO - Ports and Datasets
- Classic IO Cards and Channels
- Batch Formulas
- Function block modules
- Unit Aliases
- Unit Modules
- Process Cells
- Logic Solver Cards
- SIS Modules
- History Data Points