

# ASDP Table Maker for Alpha Five

## 1. Overview of ASDP

ASDP is a tool that automatically turns table definitions from standard SQL DDL syntax into Alpha Five Xbasic syntax. This Xbasic syntax can then be run in Alpha Five to automatically create tables and table field definitions.

ASDP is an acronym for Alpha Five SQL DDL Parser. Parsing is the process used to convert one form of syntax from another.

In a nut shell, the features of ASDP can be summarised as follows:

**What it is:** A parser that turns table definitions from standard SQL DDL into Alpha Five Xbasic.

**What it does:** Provides for Alpha Five table definitions to be automatically created from standard SQL DDL syntax.

**How it does it:** ASDP reads any standard SQL DDL file and from it creates an Xbasic global script that can then be imported into Alpha Five and run to create table and table field definitions.

**Target users:** ASDP is targeted at Alpha Five users who want to design and test a database before implementing the design in Alpha Five. Prior to the advent of ASDP, a database design that had been created in a data modelling tool had to be re-keyed and re-entered manually into Alpha Five. Not any more. Now all this can all be done automatically using ASDP.

There are many other possibilities too. For example, ASDP can parse SQL DDL intended for other database applications and create compatible field definitions for use with Alpha Five.

**Advantages:** ASDP saves you time and eliminates transcription errors in transferring a database design from a data modelling tool to Alpha Five. And at such a low cost, a total payback of the cost of ASDP can be easily obtained from its very first use.

ASDP is a free-standing executable. It does not require a copy of Alpha Five to be installed on the computer on which it is run.

## 2. How to Use ASDP

### 2.1 ASDP Requirements

ASDP pre-requisites: Any personal computer running Microsoft Windows 98 or later (98, ME, NT, 2000, XP etc).

2 MBytes of free disk space

Alpha Five version 5 or later developer's version. (Is required only to run the Xbasic global script created by ASDP).

### 2.2 ASDP Installation

If you have not already done so, run the "ASDP setup.exe" program. It is available as a free download from the web site [www.pgsgd.co.nz](http://www.pgsgd.co.nz).

The default ASDP installation and settings are as follows:

Programs folder:	c:\program files\PGSD\ASDP\
Desktop:	Shortcuts are created to ASDP.exe and this help file.
Start menu:	Start menu shortcuts are created to the program, help file, uninstaller, "about" and "license agreement" information.

Windows registry          No changes are made by ASDP or the ASDP installer.

During the installation of ASDP you may select alternatives to the default installation folder locations and names.

### 2.3 Setup File Contents

The ASDP setup file is named “ASDP setup.exe” and contains the following files:

- o ASDP.exe: The main ASDP executable installed to c:\program files\pgsd\asdp.
- o ASDP about.exe: The “About” dialog box display.
- o ASDP help documentation.pdf: This document.
- o ASDP License.pdf: The license agreement.
- o ASDP.ini: The ASDP configuration file.
- o Copy of asdp ini.bak: Backup copy of ASDP.ini.
- o Sample SQL DDL files: Four installed to folder “SQL DDL samples” under the installation folder.
- o Data modelling templates and ReadMe file installed to folder “Templates” under the installation folder.

### 2.4 A Note about Spyware, Malware, etc.

ASDP is absolutely free from any objectionable or annoying content. It contains no sponsor’s advertising material, no dial-home, monitoring, virus, secret payloads nor indeed anything surreptitious or covert in nature.

ASDP is just ASDP as described in this document, nothing more. So you can be confident when you install and use ASDP that what you see is what you get – there are absolutely no hidden surprises.

### 2.5 Testing Regime with Data Modeling Tools

ASDP has been extensively tested with the output SQL DDL from a number of data modeling tools. These data modeling tools include:

- Enterprise Architect from [www.sparxsystems.com](http://www.sparxsystems.com)
- Case Studio from [www.casestudio.com](http://www.casestudio.com)
- DeZign for Databases from [www.datanamic.com](http://www.datanamic.com)
- DBDesigner 4 from [www.fabforce.net](http://www.fabforce.net)
- Database Design Studio from [www.chillisource.com](http://www.chillisource.com)

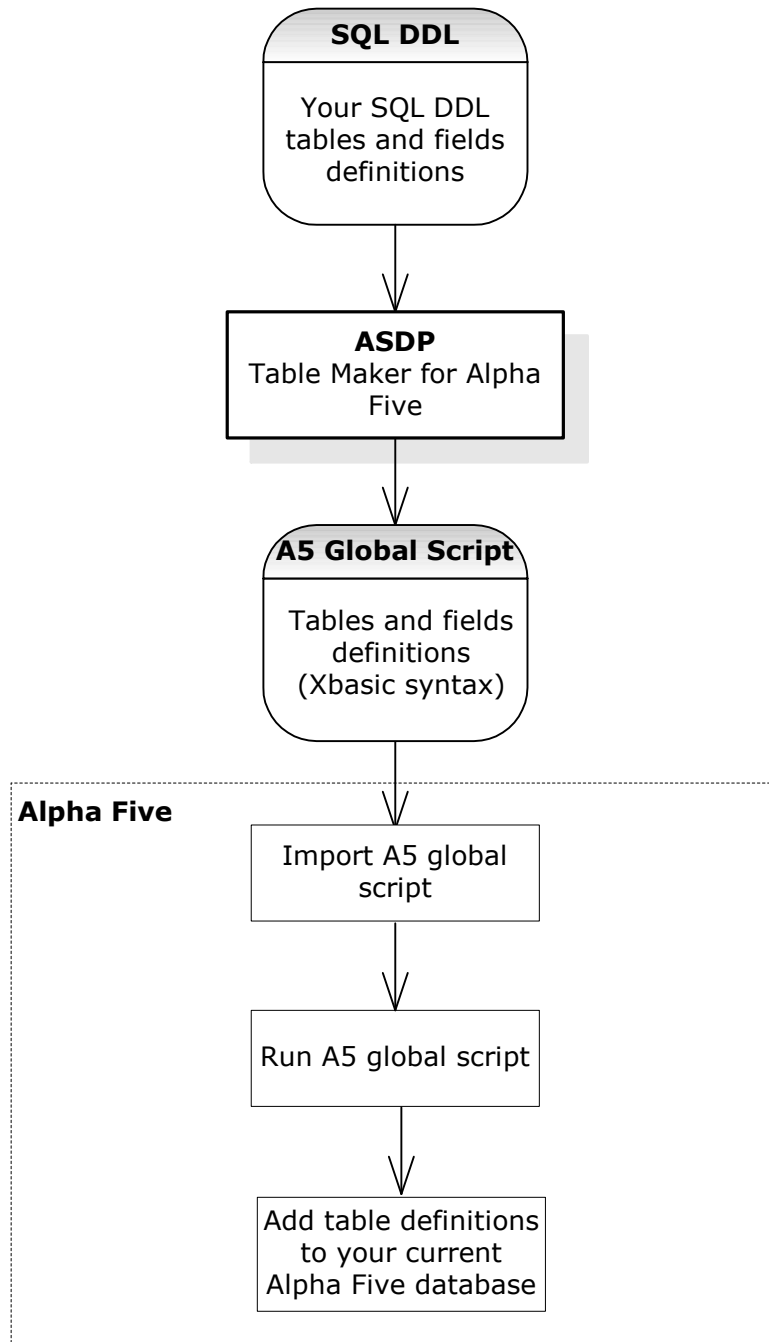
Because SQL DDL is reasonably standardized, you should not experience difficulty processing SQL DDL produced by other data modelling tools.

### 2.6 ASDP Support

If you manage to trip up ASDP with any aspect of its processing of an SQL DDL file, just send details to:

[asdpsupport@pgsd.co.nz](mailto:asdpsupport@pgsd.co.nz)

Remember to be as explicit in your description of the problem as possible and include a representative sample taken from the SQL DDL you are experiencing the problem with. Also include a copy of your ASDP.ini file (refer section 4) if you have customized it in any way.

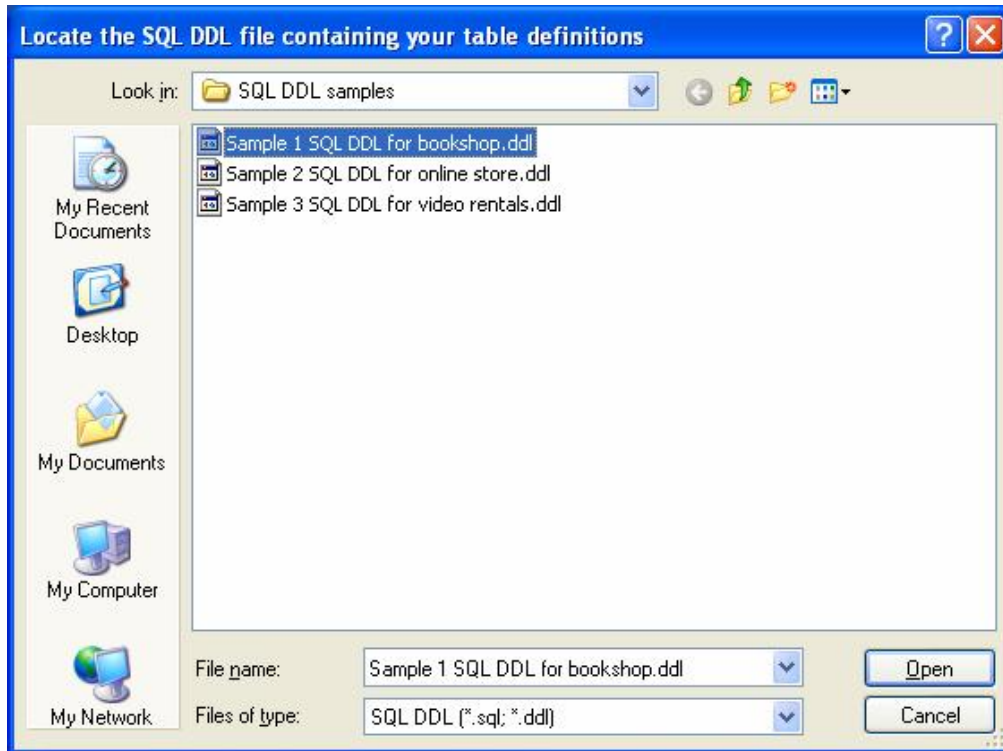


**Figure 1: ASDP usage flow chart**

## 2.7 How to Run ASDP

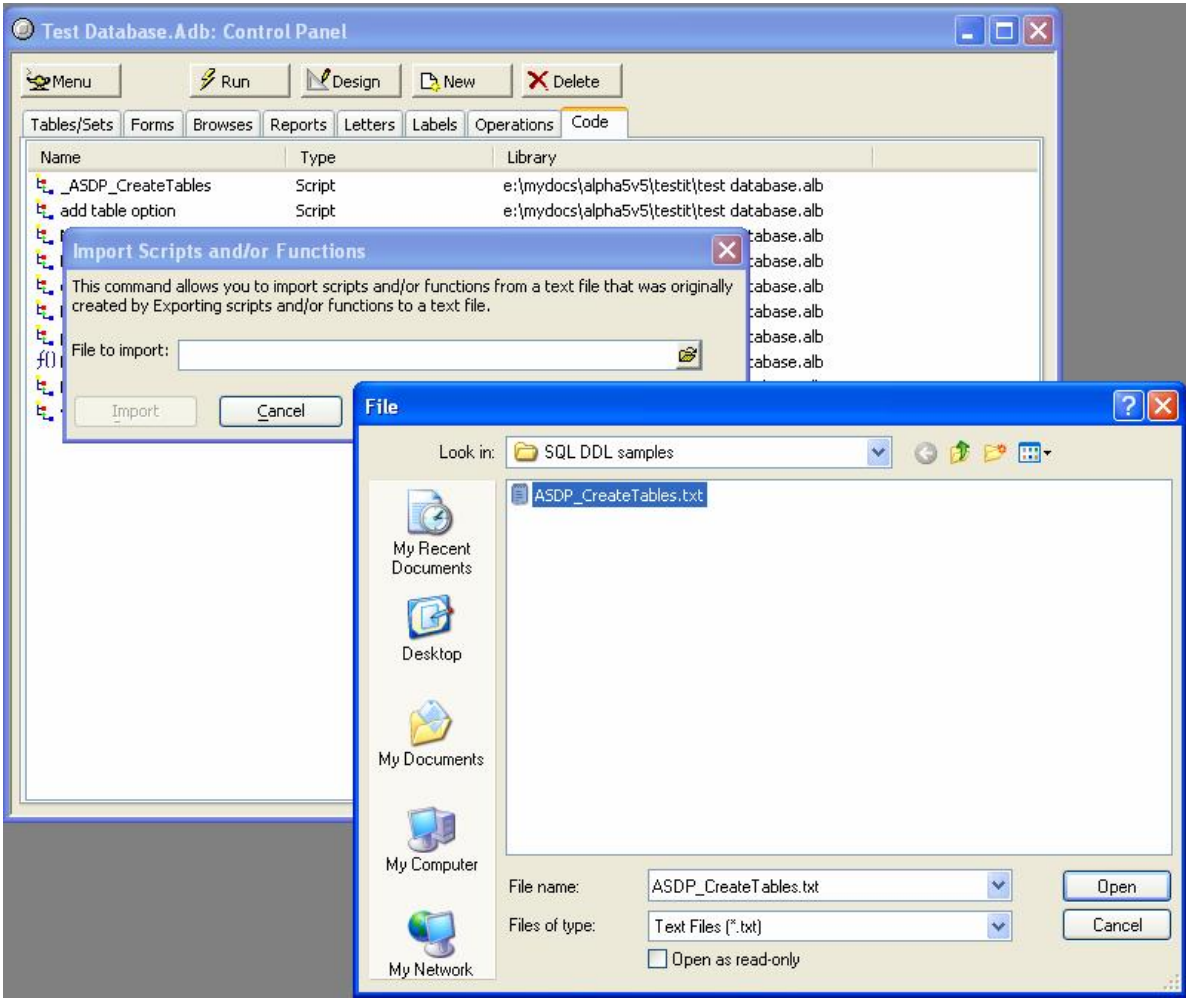
The steps in the use of ASDP are illustrated in Figure 1 (previous page). These steps are further detailed as follows:

1. Run ASDP from your desktop icon or start menu and browse to the SQL DDL file you want to use. See Figure 2. Highlight the file and click on the “Open” button. ASDP will now process your indicated file.



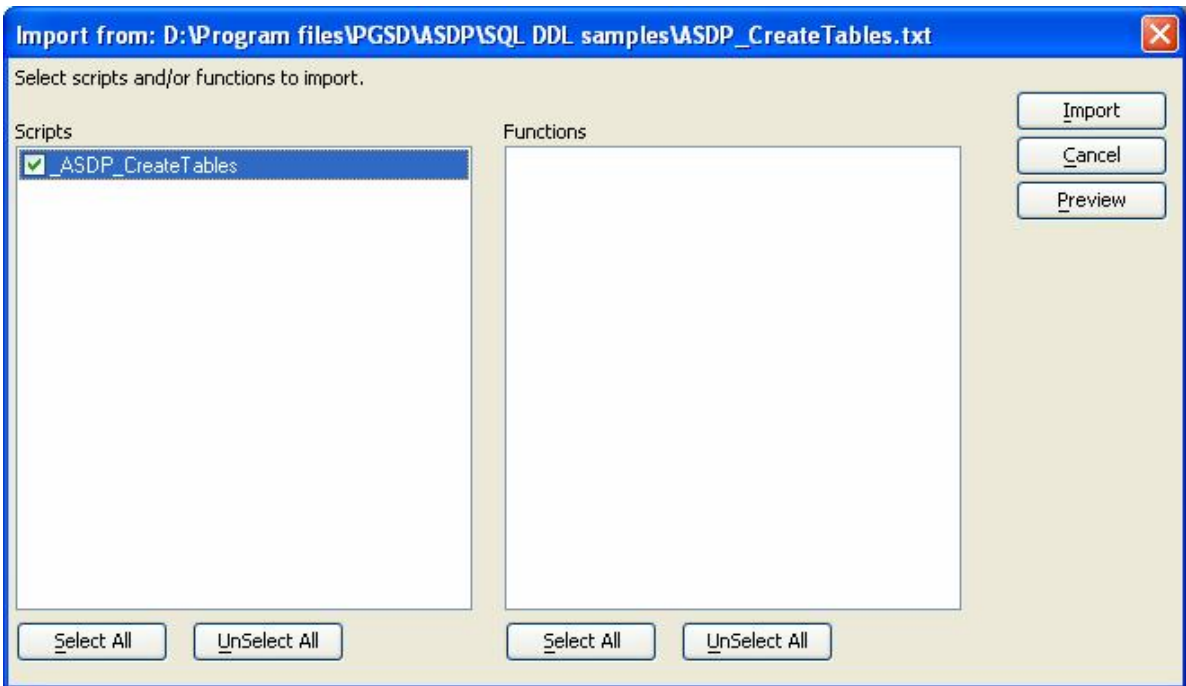
**Figure 2: Browse to locate your SQL DDL file.**

2. Note the name and location of the Alpha Five global script created by ASDP. This global script is named “**ASDP\_CreateTables.txt**” and is placed in the same folder as the SQL DDL file selected in step 1.
3. Go to Alpha Five and either create a new or open an existing Alpha Five database in which you want to create the tables from your SQL DDL file.
4. Go to the Alpha Five control panel and select the “Code” tab.
5. Right click anywhere on the Code window’s white background and select the “Import...” option.
6. From the dialog box “Import Scripts and/or Functions”, locate the file “ASDP\_CreateTables.txt” and click on the “Open” button. See Figure 3.



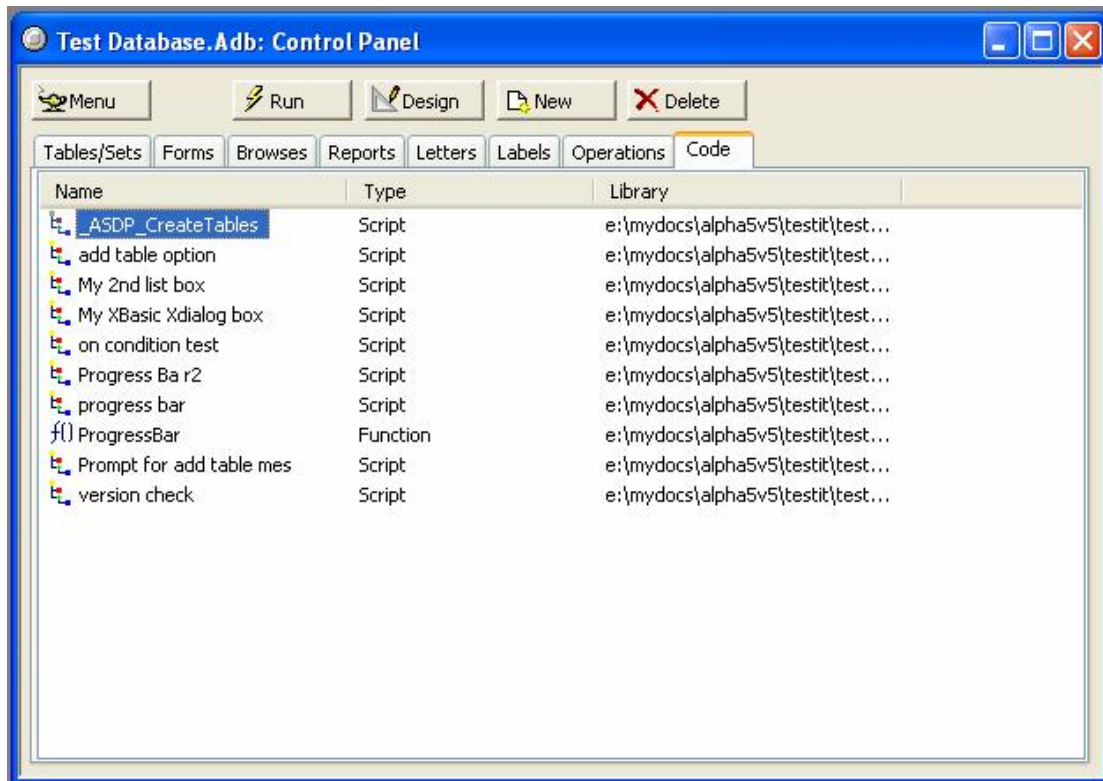
**Figure 3: Import the ASDP global script into Alpha Five**

7. Now highlight the global script and click on the “Import” button. See Figure 4.



**Figure 4: Import the ASDP global script.**

8. **BACKUP EXISTING TABLE DATA:** Before proceeding with step 9, if there is any important data in existing tables with the same name and residing in the same folder as any of those you are about to create, make sure you have created a copy or backup of this information as Alpha Five will overwrite tables without first issuing a warning.
9. To create your tables, run the script named “\_ASDP\_CreateTables” by clicking on the “Run” button or by double clicking on the script name. See Figure 5.



**Figure 5: Run the script “\_ASDP\_CreateTables” to create your tables.**

10. **IMPORTANT:** Your tables will have now been created but may not have yet been added to your current Alpha Five database. If this is the first time either:
  - (a) any table has been created, or
  - (b) any table has been altered and not previously added to your Alpha Five database with these changes, then

you will need to select and run the File menu option “Add Tables/Sets to Database” and add all those tables to your database that meet the criteria a or b above. Select the “Add all >>” button or just select and add those tables you want added to your database. (See Figure 6). Most common is to add all tables to an Alpha Five database after their creation in a data modelling tool.

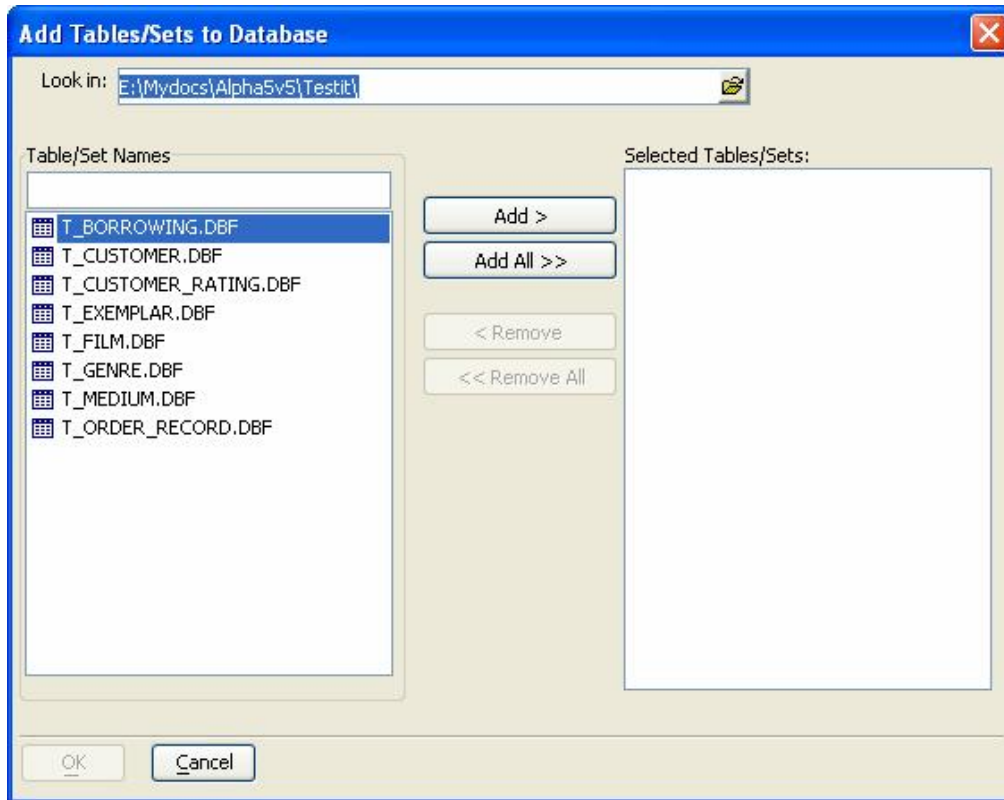


Figure 6: Add tables to the current Alpha Five database.

11. Your new tables will now be visible in the Alpha Five control panel, Tables tab.

### 3. Data Types Supported by ASDP

#### 3.1 Alpha Five Data Formats

ASDP supports the following Alpha Five data type formats:

Field Type Name	Alpha Five Type Code	Length	Comments
Bitmap	B	not required	
Character	C	1 to 255	Converted to type code "M" by ASDP if length exceeds 255.
Date	D	not required	
ExponentNumeric	E	not required	Not supported in version 5. Converted to "N(19,8)" by ADSP for version 5.
Jpeg	J	not required	
LinkedImage	I	not required	
Logical	L	not required	
Memo	M	not required	
Numeric	N	1 to 19 total length 0 to 14 decimals	
RichTextMemo	R	not required	
ShortTime	Y	not required	Not supported in version 5. Converted to "C(9)" by ADSP for version 5.
Time	T	not required	Not supported in version 5. Converted to "C(17)" by ADSP for version 5.

Figure 7: Alpha Five table data formats

### 3.2 Other Database Data Type Formats

ASDP supports data types for non-Alpha Five database products and converts these formats to a nearest available equivalent format for Alpha Five. Recognized formats and their converted formats are as follows:

Format	Converted by ASDP to
BigInt	Numeric(19,0)
Blob	Memo
Currency	Numeric(15,2)
DateTime	Time or Character(17) see Time in table 7.
Decimal	Numeric(19,0)
Double	see Float
Float	ExponentNumeric or Numeric(19,8) see E in figure 7.
Integer	Numeric(10,0)
LongBlob	Memo
MediumBlob	Memo
Price	Numeric(15,2)
SmallInt	Numeric(6,0)
Text	Memo
TinyInt	Numeric(4,0)
TinyText(n)	Character(n)
Varchar(n)	Character(n)

Table 8: ASDP Data Type converted formats for non-Alpha Five data type definitions

## 4. User Customization of ASDP

### 4.1 ASDP Customization Overview

Many of the features and behavior of ASDP are controlled by way of settings in a standard Windows .ini file located in the ASDP programs folder. This file is named "ASDP.ini" located in the ASDP installation folder and will be named as follows if the installation defaults were accepted:

C:\Program files\PGSD\ASDP\ASDP.ini

ASDP is installed with a fully configured ASDP.ini file which will make it behave exactly as described in this document. However, you can change this behavior by altering the ASDP.ini file contents.

There is a backup copy of ASDP.ini present in the same folder. It is named "Copy of ASDP ini.bak". If you mess up the settings in the ASDP.ini file and want to revert to the original settings, delete the file and rename the copy. You may also reinstall ASDP by just re-running the setup program. It will prompt you before overwriting an existing ASDP.ini file.

## 4.2 ASDP.ini File Contents

The ASDP.ini file is organized into the following sections:

Section Name	Description
[ASDP_ID]	Identification section. Do not alter.
[DataTypes]	Numbered 1=, 2=, 3= and so on, up to 99 entries can be specified for data types.
[Abbreviations]	Contains a list of the data type names specified in the [DataTypes] section and the abbreviations that ASDP recognizes as a synonym for the data type name.
[IgnoreLines]	Specifies words that when present in a line of SQL DDL will result in ASDP ceasing to parse the line for further syntax. Effectively this is an instruction to ASDP to ignore lines containing these words and will speed up the scanning process.
Any other	Ignored by ASDP

Figure 9: ASDP.ini file sections

Full instructions on the use and customization of the ASDP.ini file for the current version of ASDP you are using is provided in the documentation within the file itself.

## 4.3 ASDP .ini File Caution

In normal circumstances the version of the ASDP.ini file initially installed with ASDP is perfectly adequate for all purposes. If you change it, the behavior of ASDP will change too.

Precautions you can take when altering the ASDP.ini file include:

- Take another copy and keep it in another location, just in case you need to restore it.
- If the current copy becomes unusable, delete it and rename the backup copy (see 4.1).
- Re-install ASDP from the installation setup file. You will be prompted to overwrite an existing ASDP.ini file.

## 4.4 Items that Cannot be Customized

In the current version 1 of ASDP the data type field length limits cannot be altered for Character and Numeric field types. These are limits imposed by Alpha Five, not ASDP and therefore must remain as shown in Figure 7.

# 5. Other ASDP Features

## 5.1 Data Model Software Templates

ASDP comes with a number of data modelling product database templates. These templates are installed to the following location if the installation defaults were accepted:

C:\Program files\PGSD\ASDP\Templates

When used with a data modelling tool a template provides you with these additional features such as recognition for all Alpha Five data types, field name lengths, reserved word checks (so you don't accidentally give your table or data field a name that is a reserved word) and, with some products, the ability to generate compatible SQL DDL syntax.

View the ReadMe file installed in this same folder for the latest information on templates and how to install and use them.

## 5.2 Sample SQL DDL files

ASDP is installed with a number of sample SQL DDL files that you can use for experimentation and familiarization with ASDP. These files are in the following folder if the installation defaults were accepted:

C:\Program files\PGSD\ASDP\SQL DDL samples

These samples are straight out of a number of different data modelling tools and have not been altered in any way so as to make ASDP “look good”.

## 6. Data Modelling Software Compatibility

ASDP will accept SQL DDL plain text files from virtually any data modelling tool. These tools will normally assign a file extension of .sql or .ddl to these files but in fact they are just plain ascii text.

ASDP can parse any of these files from data modelling tools including such tools as:

- Enterprise Architect from [www.sparxsystems.com](http://www.sparxsystems.com)
- Case Studio from [www.casestudio.com](http://www.casestudio.com)
- DeZign for Databases from [www.datanamic.com](http://www.datanamic.com)
- DBDesigner 4 from [www.fabforce.net](http://www.fabforce.net)
- Database Design Studio from [www.chillisource.com](http://www.chillisource.com)
- Data Architect from [www.thekompany.com](http://www.thekompany.com)

## 7. Ongoing Development and Support

We will continue to develop and support ASDP but we need your support to make this viable. You can help us do this by:

- Providing helpful suggestions for improvement,
- Purchasing a registered copy of ASDP, it is very reasonably priced.

Our web site is at [www.pgsd.co.nz](http://www.pgsd.co.nz) where you can obtain further details and make your purchase. Thank you.