
StudyDocTM Report Writing Manager

Supported Database Platforms

Oracle®

Microsoft® SQL ServerTM

Microsoft® Access

Administration and Installation Manual

LABIntegrity
265 Blue Spruce Circle
Alpharetta, GA 30005
P: 770-573-0169
F: 508-453-1338

Larry.elvebak@labintegrity.com
www.labintegrity.com

¹ Not yet supported

Table of Contents

<u>Section</u>	<u>Page Number</u>
1 INTRODUCTION	5
2 DATABASE STRUCTURE.....	5
3 DEFINITIONS.....	6
4 SYSTEM REQUIREMENTS	7
5 INSTALLATION CHECKLISTS.....	8
5.1 WATSON ARCHIVED .MDB'S AND STUDYDOC ACCESS DATABASE	8
5.2 WATSON ORACLE DATABASE AND STUDYDOC ACCESS DATABASE.....	8
5.3 WATSON ARCHIVED .MDB'S AND STUDYDOC ORACLE DATABASE	9
5.4 WATSON ORACLE DATABASE AND STUDYDOC ORACLE DATABASE	9
6 SETUP EXECUTION	10
6.1 SETUP EXECUTION	10
6.2 ADDITIONAL ACTIONS PERFORMED BY SETUP.....	16
7 PHYSICAL LOCATION OF STUDYDOC ACCESS DATABASE STUDYDOC_01.MDB	17
7.1 STAND-ALONE ENVIRONMENT	17
7.2 MULTI-USER ENVIRONMENT	17
8 ODBC SYSTEM DSN CONFIGURATION.....	18
8.1 CONNECTION TO STUDYDOC ORACLE DATABASE.....	18
8.2 CONNECT TO STUDYDOC– MICROSOFT SQL SERVER DATABASE.....	22
8.3 CONNECTION TO WATSON – ORACLE DATABASE.....	23
9 STUDYDOC DATABASE CONFIGURATION – ORACLE.....	26
10 STUDYDOC DATABASE CONFIGURATION – MICROSOFT SQL SERVER	27
11 DATABASE CLIENT INSTALLATION.....	27
11.1 WATSON ORACLE DATABASE CONNECTION	27
11.2 STUDYDOC DATABASE CONNECTION	27
12 STUDYDOC_XX.INI.....	27
12.1 WATSON ARCHIVED .MDB'S AND STUDYDOC ACCESS DATABASE, STAND-ALONE WORKSTATION.....	28
12.2 WATSON ARCHIVED .MDB'S AND STUDYDOC ACCESS DATABASE, MULTI-USER ENVIRONMENT / SHARED STUDYDOC ACCESS DATABASE.....	29
12.3 WATSON ORACLE DATABASE AND STUDYDOC ACCESS DATABASE.....	30
12.4 WATSON ARCHIVED .MDB'S AND STUDYDOC ORACLE DATABASE	31
12.5 WATSON ORACLE DATABASE AND STUDYDOC ACCESS DATABASE.....	32
12.6 WATSON ORACLE DATABASE AND STUDYDOC SQL SERVER DATABASE	33
13 LABINTEGRITY PASSWORD ENCRYPTION TOOL.....	34
14 STUDYDOC ORACLE DATABASE CREATION AND CONFIGURATION.....	34

Table of Contents

<u>Section</u>		<u>Page Number</u>
15	INSTALLATION OF DATABASE CLIENTS	34
16	WATSON USERID CREATION FOR STUDYDOC USE.....	34
17	DATABASE TABLE STRUCTURES AND DEFINITIONS	35
18	REFERENCES	35

Table of Figures

<u>Figure</u>		<u>Page Number</u>
FIGURE 1	STUDYDOC - ORACL DSN - ODBC DATA SOURCE ADMINISTRATOR - SYSTEM DSN	19
FIGURE 2	STUDYDOC – ORACLE DSN - CREATE A NEW DATA SOURCE WIZARD	20
FIGURE 3	STUDYDOC - ORACLE DSN –ORACLE ODBC DRIVER CONFIGURATION	21
FIGURE 4	STUDYDOC - ORACLE DSN – ORACLE ODBC DRIVER CONNECT	21
FIGURE 5	WATSON - ORACLE DSN – ODBC DATA SOURCE ADMINISTRATOR - FINAL	22
FIGURE 6	WATSON - ORACL DSN - ODBC DATA SOURCE ADMINISTRATOR - SYSTEM DSN	23
FIGURE 7	WATSON – ORACLE DSN - CREATE A NEW DATA SOURCE WIZARD	24
FIGURE 8	WATSON - ORACLE DSN –ORACLE ODBC DRIVER CONFIGURATION	25
FIGURE 9	WATSON - ORACLE DSN – ORACLE ODBC DRIVER CONNECT	25
FIGURE 10	WATSON - ORACLE DSN – ODBC DATA SOURCE ADMINISTRATOR - FINAL	26

1 Introduction

LabIntegrity StudyDoc™ - Report Writing Manager - is a 21 CFR Part 11-compliant software application that allows study directors to manage the Report Writing portion of the execution of a Food and Drug Administration (FDA)-regulated study (henceforth referred to as a GLP (Good Lab Practices) study). For example, a Method Validation study or a Sample Analysis study.

Currently StudyDoc is designed to retrieve and report data from the Thermo™ Watson™ Oracle database (or an archived Microft® Access database produced when performing a Watson study archive action – henceforth referred to as an ‘archived .mdb’). In the future, StudyDoc will include its own Study Design and secure raw data storage features.

StudyDoc stores StudyDoc Report Writing non-raw data information needed to complete the report in its own datastore (see Section 2)

For further introductory information about StudyDoc, please see the StudyDoc User Guide.

The most current version of this manual may be found by browsing to www.labintegrity.com and navigating to the StudyDoc product page.

2 Database Structure

StudyDoc interacts with two databases:

- A Watson database
 - Main Oracle database
or
 - Archived .mdb
 - Microsoft® Access
- The StudyDoc database
 - Oracle
or
 - Microsoft® SQL Server™
or
 - Microsoft® Access

From the Watson database, StudyDoc retrieves instrument injection concentration data for a selected Watson study and underlying meta-data related to each concentration (e.g. analyte name, nominal concentration, instrumental sequence identification, etc.) and stores the information in Random Access Memory (RAM).

In the StudyDoc database, StudyDoc stores information needed to complete the Report Body portion of a Study Report, including:

- Report Template Configuration
- Report Table Configuration
- Analytical Reference Standard
- Contributing Personnel
- Samples Assigned to Report Tables *
- Corresponding Method Validation Study
- QA Events
- Sample Receipt
- Appendices and Figures

* No Watson data that is considered ‘Raw Data’ (as defined in 21 CFR Part 58.3(k)) is stored permanently in the StudyDoc database. If samples need to be assigned to a report table, a pointer to the actual Watson data is stored in the StudyDoc database.

3 Definitions

Term	Definition
Archive .mdb	The archived database produced by Watson when performing a study archiving action
CDS	Chromatography Data System
DSN	Data Source Name
EULA	End User License Agreement
MS	Microsoft®
QC	Quality Control
RAM	Random Access Memory
IT	Information Technology

4 System Requirements

The following describes the environments on which StudyDoc is configured and developed. The user is free to install StudyDoc on workstations of differing configuration with the understanding that:

- StudyDoc should be tested before implementing the differing configuration.
- StudyDoc may not perform as expected in a lesser configuration than that recommended below.

Please note that a minimum requirement is not required for Watson. StudyDoc interacts with the Oracle database, not Watson itself.

Client Workstation		
Item	Minimum Requirement	Development Environment ¹
Operating System	Windows™ 7 SP1 32-bit ¹⁰	Windows™ 7 SP1 64-bit
CPU	Intel i5 or equivalent	Intel i7 Quad Core 2.5 GHz
RAM (GB)	4 or 8 ¹⁰	32.0
Monitor Resolution ²	1280 x 768	1920 x 1080
Word Processor	Microsoft Word 2010	Microsoft Word 2010
Spreadsheet ³	Microsoft Excel 2010	Microsoft Excel 2010
Oracle Client – Watson ⁴	NA ⁵	11gR2
Oracle OLE Client – StudyDoc ⁶	NA ⁷	Developer Tools For .Net 11.2.0.2.1
SQL Server Client ⁸	NA ⁹	SQL Server Native Client 10.0
¹ The environment on which StudyDoc is developed.		
² The user is free to use any resolution desired; however, resolutions lower than that required will result in some labels and boxes overlapping each other, but StudyDoc functionality will not be affected.		
³ Used if it is desired to insert Calibration Curves in the study report.		
⁴ If connecting to the Watson Oracle database		
⁵ The installed client must be compatible with the existing Watson Oracle database		
⁶ If using Oracle as the StudyDoc database		
⁷ The installed client must be compatible with the Oracle version used		
⁸ If using Microsoft SQL Server database as the StudyDoc database		
⁹ The installed client must be compatible with the Microsoft SQL Server version used		
¹⁰ StudyDoc performs better with increasing amounts of RAM. 32-bit OS is not recommended because of 32-bit 4.0 Gb RAM limitation.		

StudyDoc Database		
Microsoft Access		
Same information as Client Workstation Note that the StudyDoc Access database can be placed on a network file server		
Oracle		
Item	Minimum Requirement	Development Environment ¹
Oracle Version	9i ¹	11gR2
Microsoft SQL Server		
SQL Server version	SQL Server 2005 ¹	SQL Server 2008 R2
¹ Database version must simply be ANSI-compliant		

5 Installation Checklists

It is recommended that administrators perform StudyDoc Setup according to the following steps. Please refer to each referenced section for a detailed discussion of each step:

5.1 Watson archived .mdb's and StudyDoc Access database

Installation Step	Section
<ul style="list-style-type: none"> Inspect system requirements and prerequisites 	Section 4
<ul style="list-style-type: none"> Execute Setup.exe Note: If the installation is a subsequent upgrade to a new version of StudyDoc, then ignore the rest of this Section 	Section 6
<ul style="list-style-type: none"> Determine the physical location of the StudyDoc database StudyDoc_01.mdb (to be used to modify the StudyDoc.ini file) 	Section 7
<ul style="list-style-type: none"> Configure the C:\LabIntegrity\StudyDoc\Ini\StudyDoc.ini file 	Section 12

5.2 Watson Oracle database and StudyDoc Access database

Installation Step	Section
<ul style="list-style-type: none"> Inspect system requirements and prerequisites 	Section 4
<ul style="list-style-type: none"> Install Oracle ODBC client driver on StudyDoc client workstation 	Section 0
<ul style="list-style-type: none"> Create StudyDoc Read-only user account in the Watson Oracle database 	Section 16
<ul style="list-style-type: none"> Configure ODBC DSN connection for connection to the Watson Oracle database 	Section 8.3

Installation Step	Section
<ul style="list-style-type: none"> Execute Setup.exe Note: If the installation is a subsequent upgrade to a new version of StudyDoc, then ignore the rest of this Section 	Section 6
<ul style="list-style-type: none"> Determine the physical location of the StudyDoc database StudyDoc_01.mdb (to be used to create an ODBC DSN file) 	Section 7
<ul style="list-style-type: none"> Configure the C:\LabIntegrity\StudyDoc\Ini\StudyDoc.ini file 	Section 12

5.3 Watson archived .mdb's and StudyDoc Oracle database

Installation Step	Section
<ul style="list-style-type: none"> Inspect system requirements and prerequisites 	Section 4
<ul style="list-style-type: none"> Create and configure StudyDoc Oracle database 	Section 9
<ul style="list-style-type: none"> Install Oracle OLEDB client driver on StudyDoc client workstation 	Section 11.2
<ul style="list-style-type: none"> Configure ODBC DSN connection for connection to the StudyDoc Oracle database 	Section 8.1
<ul style="list-style-type: none"> Execute Setup.exe Note: If the installation is a subsequent upgrade to a new version of StudyDoc, then ignore the rest of this Section 	Section 6
<ul style="list-style-type: none"> Configure the C:\LabIntegrity\StudyDoc\Ini\StudyDoc.ini file 	Section 12

5.4 Watson Oracle database and StudyDoc Oracle database

Installation Step	Section
<ul style="list-style-type: none"> Inspect system requirements and prerequisites 	Section 4
<ul style="list-style-type: none"> Install Oracle ODBC client driver on StudyDoc client workstation 	Section 0
<ul style="list-style-type: none"> Create StudyDoc Read-only user schema in the Watson Oracle database 	Section 16
<ul style="list-style-type: none"> Configure ODBC DSN connection for connection to the Watson Oracle database 	Section 8.3

Installation Step	Section
<ul style="list-style-type: none"> • Create and configure StudyDoc Oracle database 	Section9
<ul style="list-style-type: none"> • Install Oracle OLEDB client driver on StudyDoc client workstation 	Section 11.2
<ul style="list-style-type: none"> • Configure ODBC DSN connection for connection to the StudyDoc Oracle database 	Section 8.1
<ul style="list-style-type: none"> • Execute Setup.exe • Note: If the installation is a subsequent upgrade to a new version of StudyDoc, then ignore the rest of this Section 	Section 6
<ul style="list-style-type: none"> • Configure the C:\LabIntegrity\StudyDoc\Ini\StudyDoc.ini file 	Section 12

6 Setup Execution

NOTES:

If a previous installation of StudyDoc exists on the workstation, it must be uninstalled (use the Windows Control Panel - Add/Remove Programs Control Panel) before a new version of StudyDoc is installed.

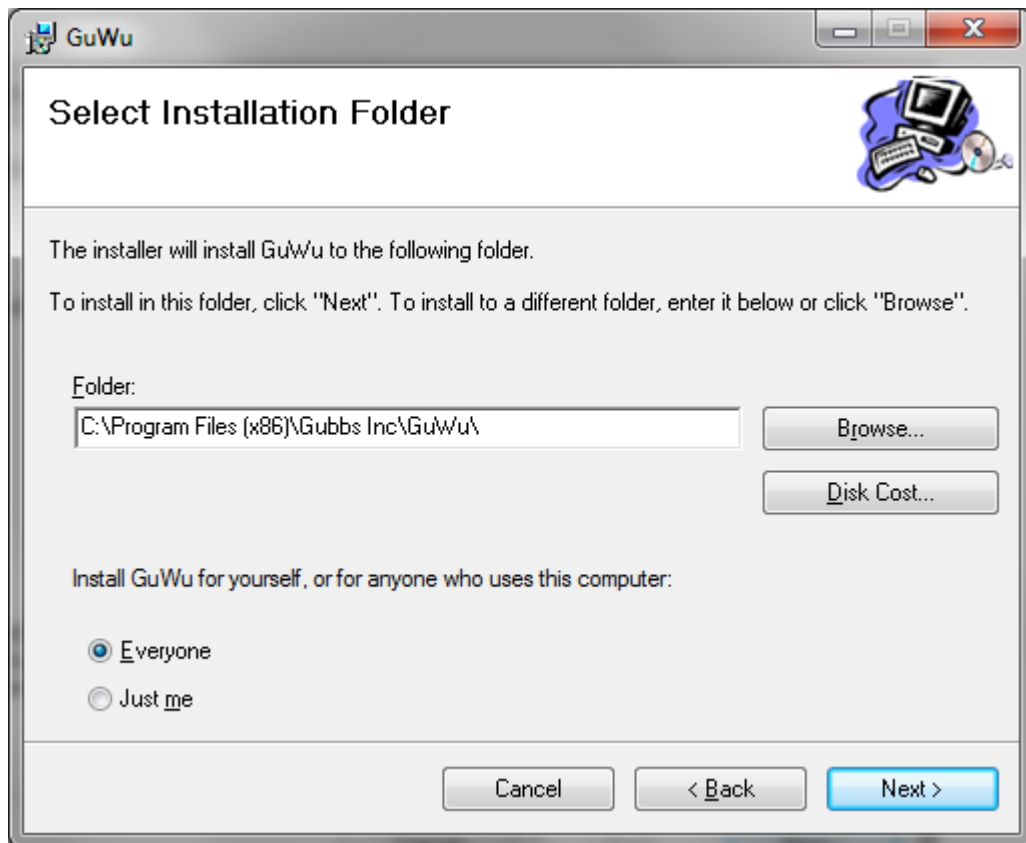
6.1 Setup Execution

Note: The contents of the screens described in this section may differ slightly from actuality.

Run the StudyDoc Setup.exe executable. The following screens will be presented:

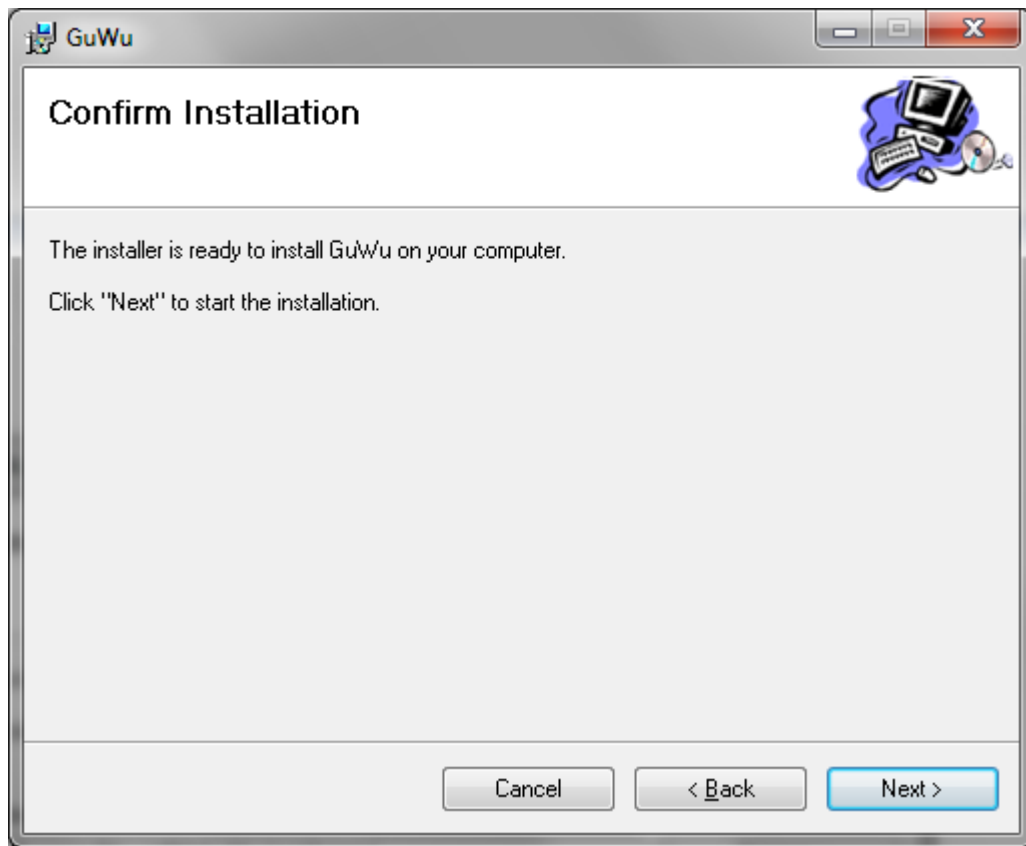


Click Next

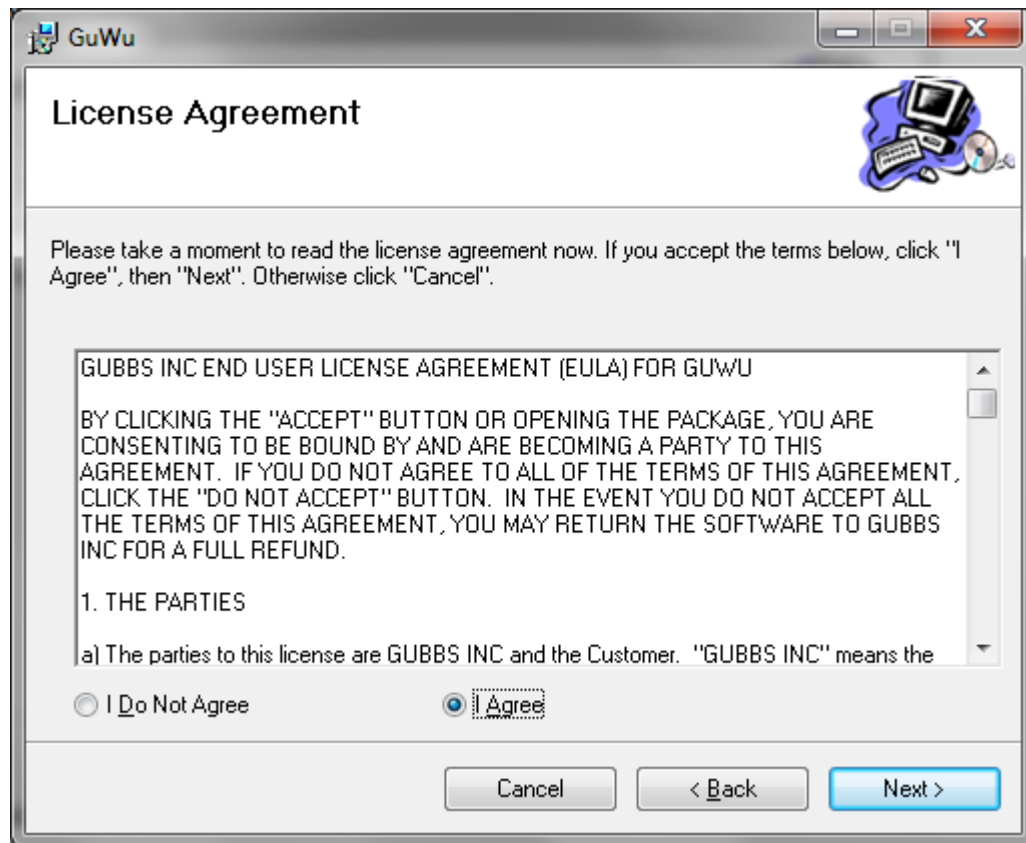


Click Next.

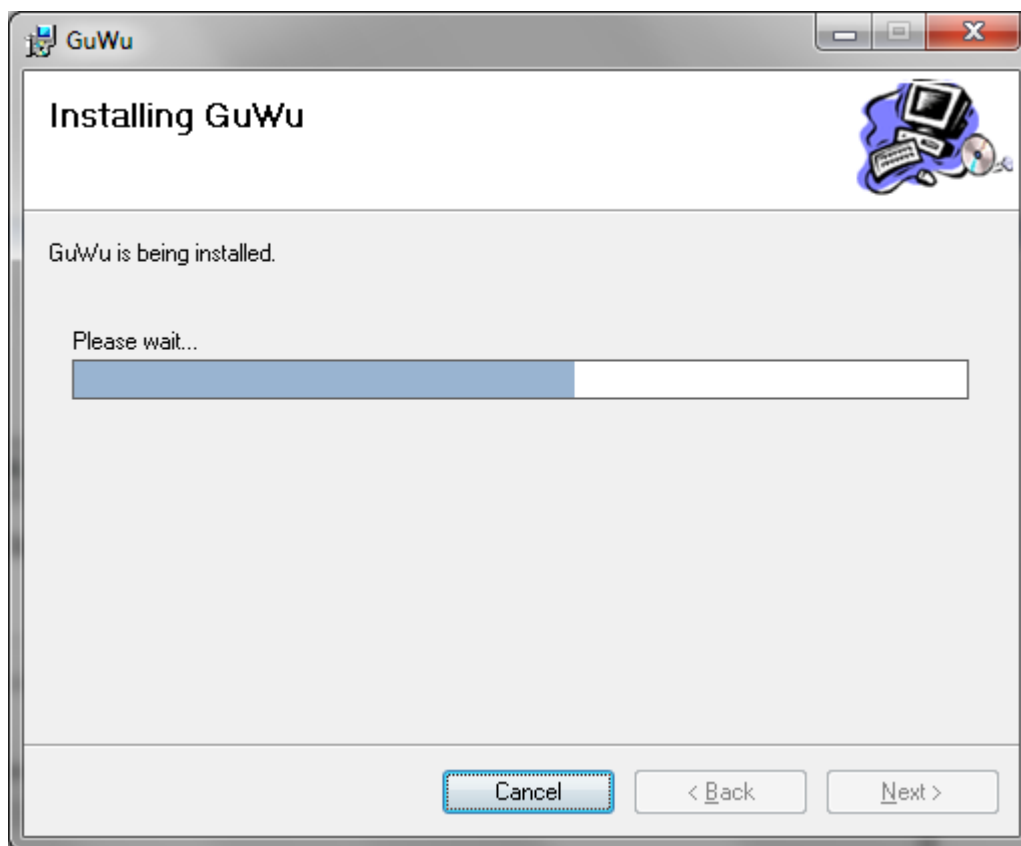
NOTE: Folder' path may be different than shown above. It is recommended to keep the displayed settings



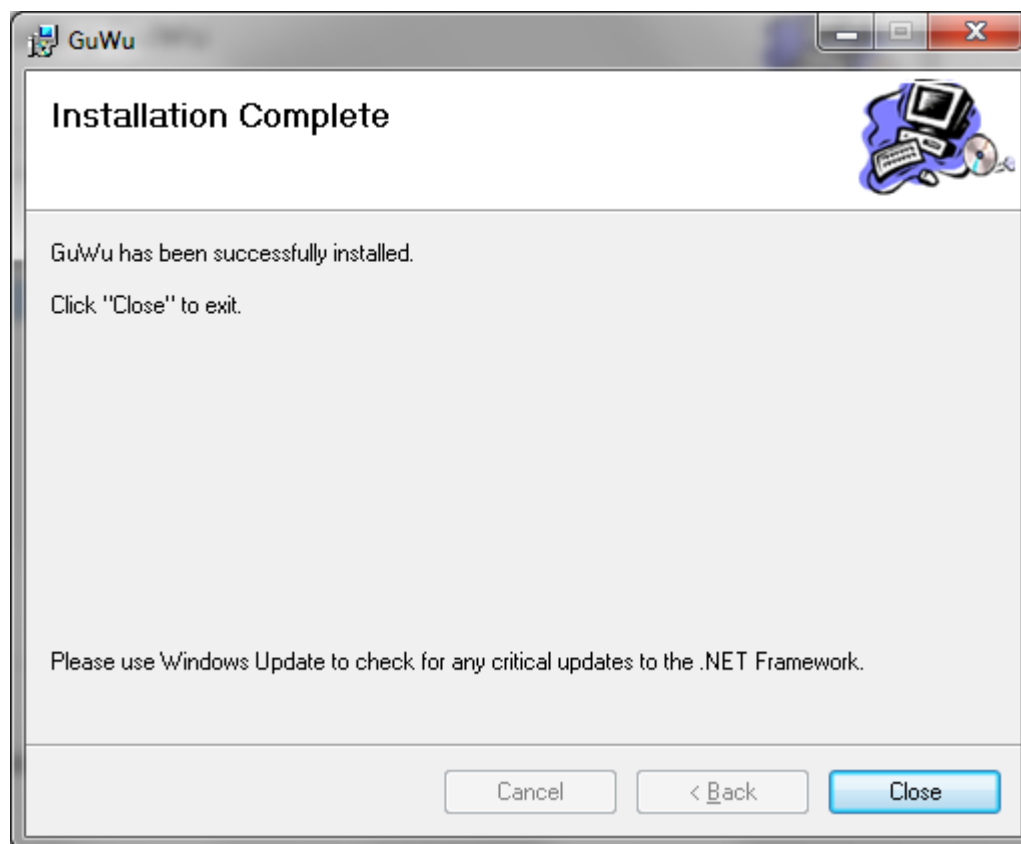
Click Next



Read the End Users License Agreement (EULA), select the 'I Agree' button, then click Next. If the user does not agree to the EULA, the installation cannot continue.



Wait for installation to complete



Click Close

6.2 Additional Actions Performed by Setup

In addition to installing the StudyDoc software, Setup.exe will perform the following tasks:

6.2.1 Directory creation

Setup.exe will create a C:\LABINTEGRITY\StudyDoc\ directory and several subdirectories related to StudyDoc operation. If the directories already exist, then they will not be re-created and existing files within these directories will not be deleted or modified.

The StudyDoc setup.exe will create the following StudyDoc directories.

C:\LabIntegrity\StudyDoc\

C:\LabIntegrity\StudyDoc\ArchivedMDBs\

Users may use this folder to place Watson study archived .mdb's, though the archived .mdb's may be stored anywhere.

C:\LabIntegrity\StudyDoc\Doc\

This folder is not currently used.

C:\LabIntegrity\StudyDoc\Ini\

This folder contains the StudyDoc.ini file that is used to direct database connections during StudyDoc startup (see Section 12).

C:\LabIntegrity\StudyDoc\MDBDatabase\

This folder contains the StudyDoc_01.mdb Microsoft Access file.

- C:\LabIntegrity\StudyDoc\ReportTemplates\
This folder is not currently used.
- C:\LabIntegrity\StudyDoc\Temp\
This folder is used to store temporary .doc(x) and .xml files created by StudyDoc during a report generation action.
- C:\LabIntegrity\StudyDoc\XML\
This folder is not currently used.
- C:\LabIntegrity\StudyDoc\Test\
This folder is not currently used.
- C:\LabIntegrity\StudyDoc\Manuals\
This folder contains StudyDoc User Guide and Administrator Guide documents.
- C:\LabIntegrity\StudyDoc\Logs\
This folder is not currently used.

6.2.2 StudyDoc_01.ini file creation

See Section 12 for further discussion of the StudyDoc.ini file.

6.2.2.1 Original Installation

Setup will create a StudyDoc_01.ini file in C:\LABINTEGRITY\StudyDoc\.

6.2.2.2 Subsequent Installation

If StudyDoc_01.ini already exists in C:\LABINTEGRITY\StudyDoc\, Setup.exe will not overwrite the file.

6.2.3 StudyDoc_01.mdb file creation

6.2.3.1 Original Installation

Setup.exe will create a StudyDoc_01.mdb file in C:\LABINTEGRITY\StudyDoc\MDBDatabase\.

6.2.3.2 Subsequent Installations

If StudyDoc_01.mdb already exists in C:\LABINTEGRITY\StudyDoc\Database\, Setup.exe will not overwrite the file.

7 Physical Location of StudyDoc Access database StudyDoc_01.mdb

If Oracle or Microsoft SQL Server is to be used as the StudyDoc database, then this section may be ignored.

7.1 Stand-alone Environment

If StudyDoc is to be used as a stand-alone application and the StudyDoc database will not be shared by other users, then it is recommended that the StudyDoc database StudyDoc_01.mdb be left in its original installation location of C:\LABINTEGRITY\StudyDoc\MDBDatabase\.

7.2 Multi-user Environment

In order for StudyDoc to be used in a multi-user environment, the StudyDoc_01.mdb file must be located in a shared directory to which all StudyDoc users have access. The preferable location for

StudyDoc_01.mdb is on a network directory, but it can also reside on a local directory that has been shared out to all StudyDoc users with a minimum Directory Security setting of Read/Write. If a network directory will be used, it is at this point that the network directory should be defined for the installation step Section 8. Ensure that the network location has been shared to all StudyDoc users with a minimum Directory Security setting of Read/Write.

8 ODBC System DSN Configuration

StudyDoc connects to Oracle or Microsoft SQL Server databases via an ODBC System DSN file. The following sections describe the creation of these DSN files depending on the database with which to be connected.

8.1 Connection to StudyDoc Oracle database

NOTE: The StudyDoc Oracle database must be created and configured (see Section 14) before this step can be completed.

NOTE: The Oracle client must be installed on the client workstation (see Section 15) before this step can be completed.

The StudyDoc administrator or an IT representative must manually create the DSN file according to this section.

StudyDoc communicates with the StudyDoc Oracle database via a system DSN file. Create the DSN according to the following procedure:

8.1.1 ODBC Data Source Administrator

In Windows, open Control Panel – Administrative Tools – Data Sources
 Open the Data Source Administrator and select the System DSN tab

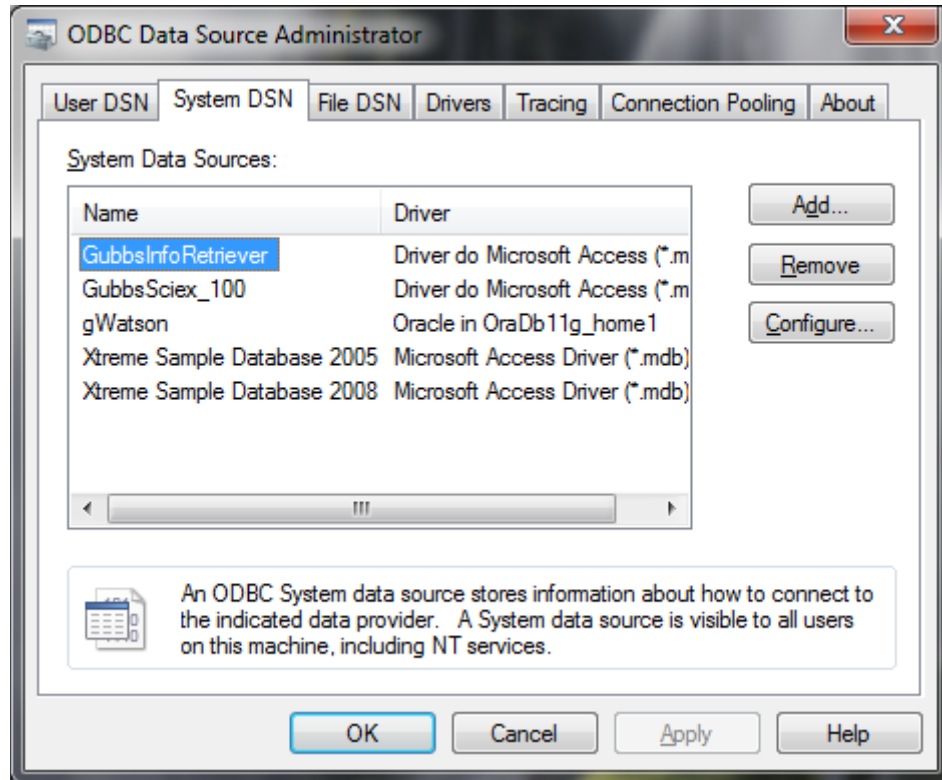


Figure 1 StudyDoc - Oracl DSN - ODBC Data Source Administrator - System DSN

8.1.2 Create New Data Source

Click on the Add... button to start the Create a New Data Source Wizard

Select “Oracle in OraDBxxxxxx” and click on Finish

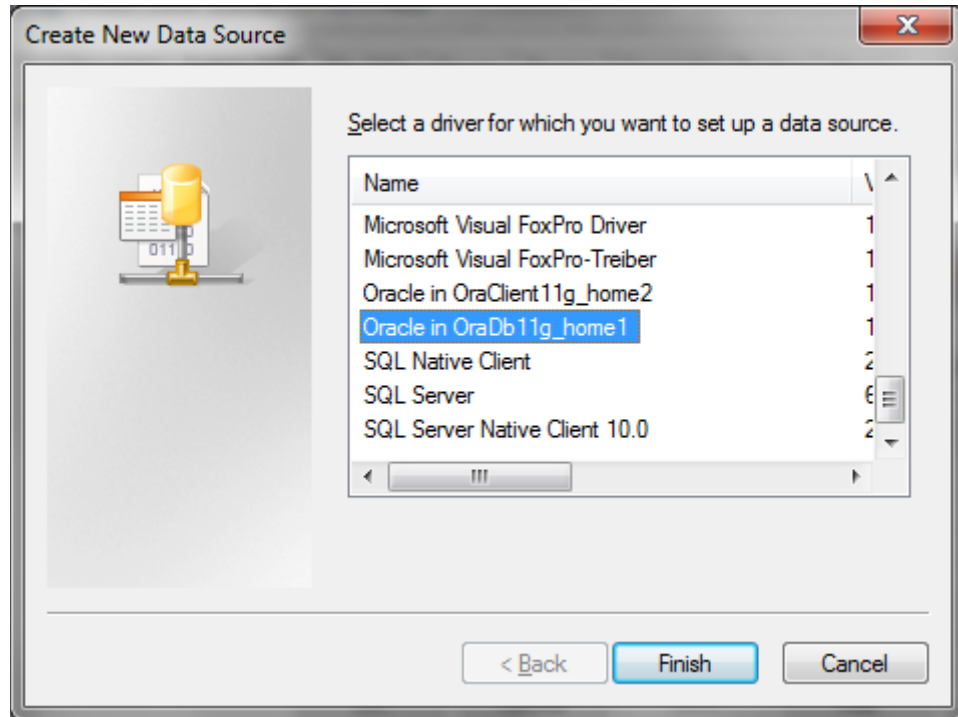


Figure 2 StudyDoc – Oracle DSN - Create a New Data Source Wizard

8.1.3 Oracle OLEDB Driver Configuration

At the Configuration window, enter information as shown below

- use the UserID and TNS Service Name created in Section 14

The Data Source Name value will be used when configuring the StudyDoc.ini file described in Section 12).

NOTE: 'Data Source Name' can be any value desired

Click 'Test Connection' to test the connection

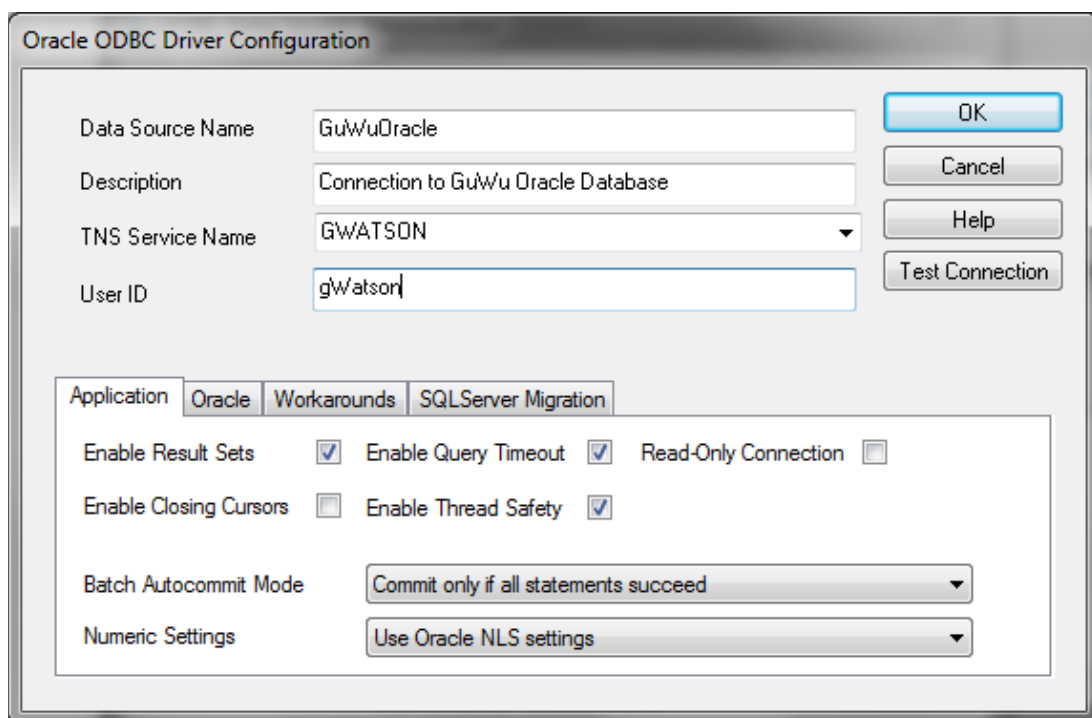


Figure 3 StudyDoc - Oracle DSN –Oracle ODBC Driver Configuration

8.1.4 Oracle ODBC Driver Connect window

Enter the password for the User ID/User Name and click OK

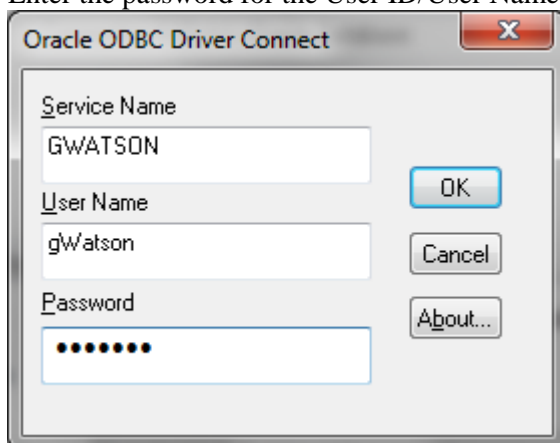
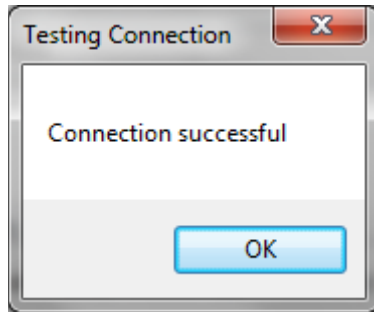


Figure 4 StudyDoc - Oracle DSN – Oracle ODBC Driver Connect

Ensure that connection is successful. If not, please contact your IT representative.



8.1.5 Final OK

Click OK to complete the DSN configuration process.

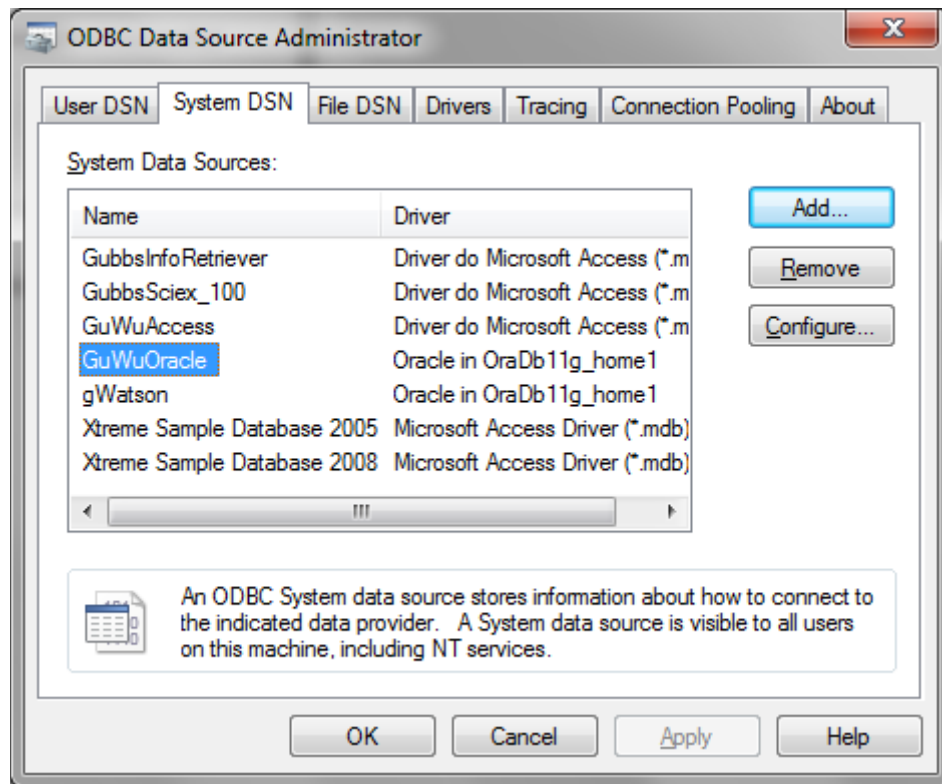


Figure 5Watson - Oracle DSN – ODBC Data Source Administrator - Final

8.2 Connect to StudyDoc– Microsoft SQL Server database

Connection string is contained in StudyDoc.ini file

8.3 Connection to Watson – Oracle database

The StudyDoc administrator or an IT representative must manually create the DSN file according to this section.

StudyDoc communicates with the Watson Oracle database via a system DSN file. Create the DSN according to the following procedure:

8.3.1 ODBC Data Source Administrator

In Windows, open Control Panel – Administrative Tools – Data Sources
Open the Data Source Administrator and select the System DSN tab

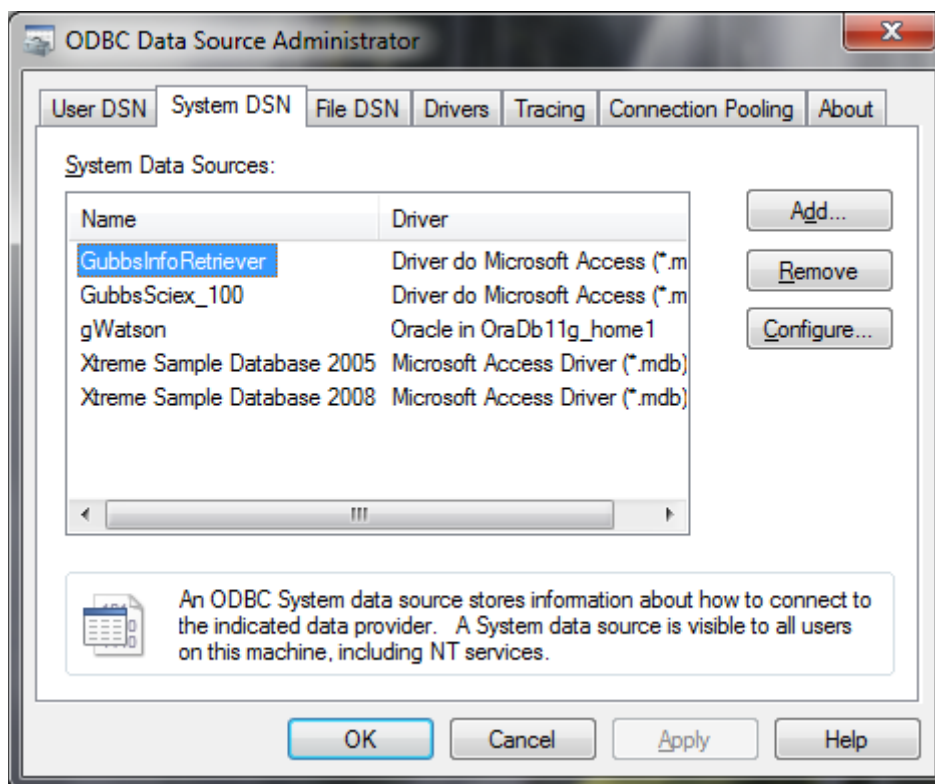


Figure 6 Watson - Oracl DSN - ODBC Data Source Administrator - System DSN

8.3.2 Create New Data Source

Click on the Add... button to start the Create a New Data Source Wizard

Select “Oracle in OraDBxxxxxx” and click on Finish

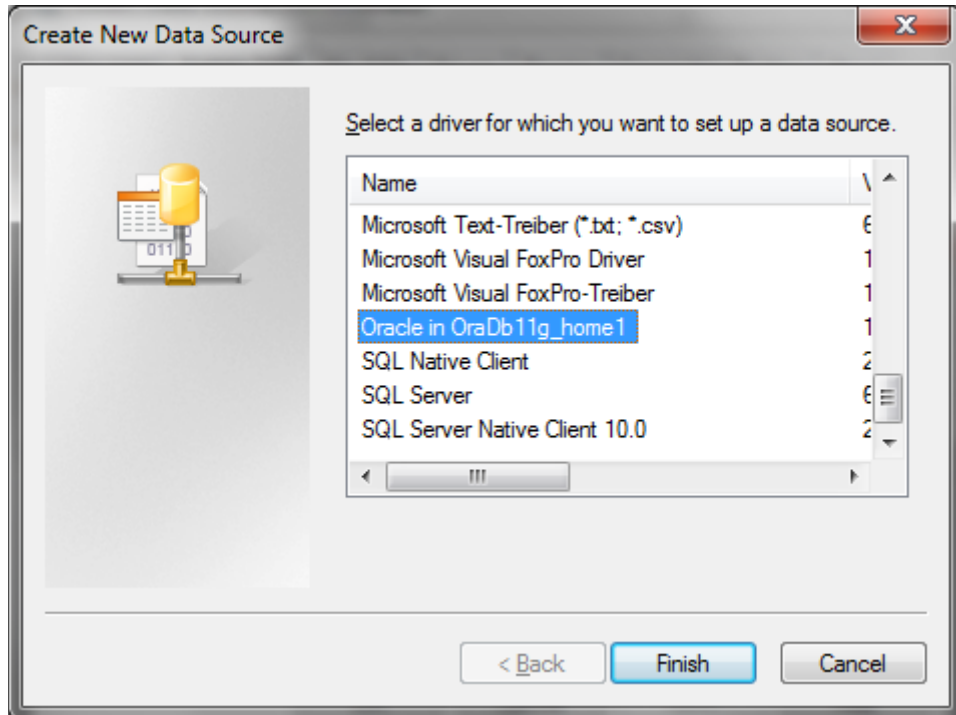


Figure 7 Watson – Oracle DSN - Create a New Data Source Wizard

8.3.3 Oracle ODBC Driver Configuration

At the Configuration window, enter information as shown below

- use the UserID and TNS Service Name created in Section 15

The Data Source Name value will be used when configuring the StudyDoc.ini file described in Section 12).

NOTE: 'Data Source Name' can be any value desired

Click 'Test Connection' to test the connection

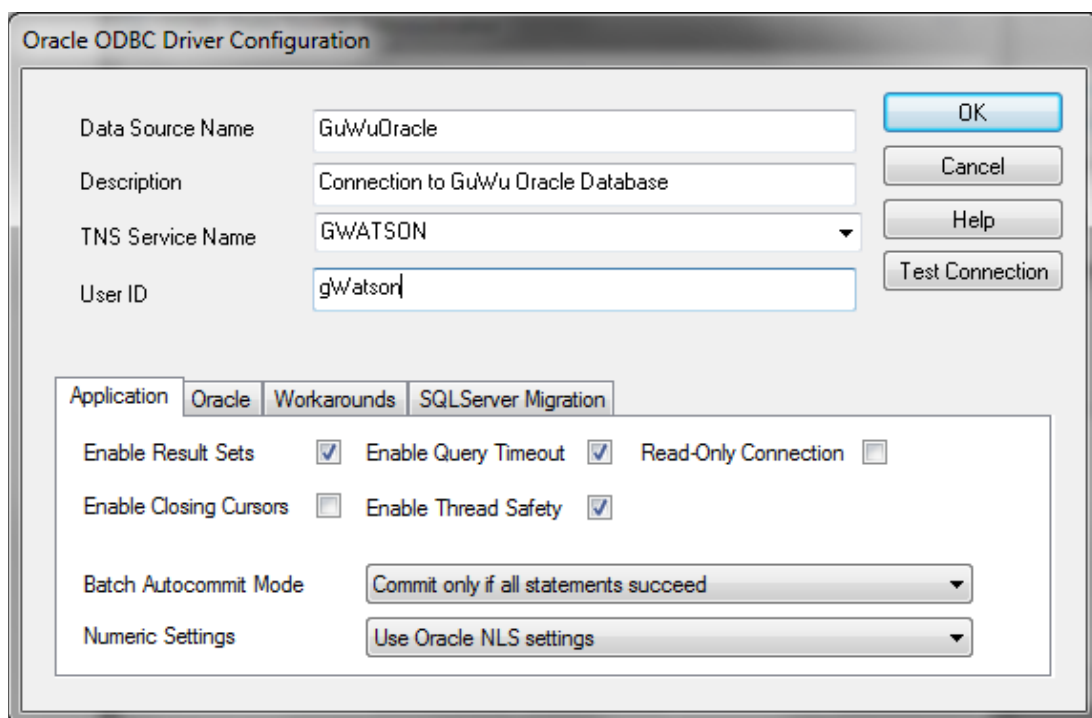


Figure 8 Watson - Oracle DSN –Oracle ODBC Driver Configuration

8.3.4 Oracle ODBC Driver Connect window

Enter the password for the User ID/User Name and click OK

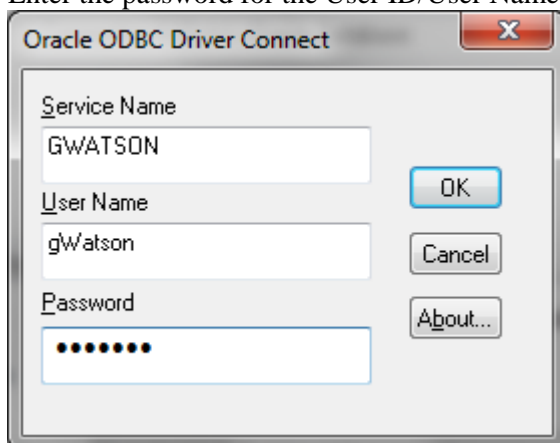
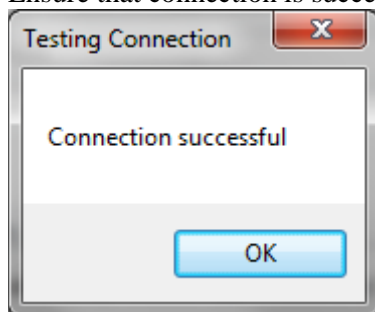


Figure 9 Watson - Oracle DSN – Oracle ODBC Driver Connect

Ensure that connection is successful. If not, please contact your IT representative.



8.3.5 Final OK

Click OK to complete the DSN configuration process.

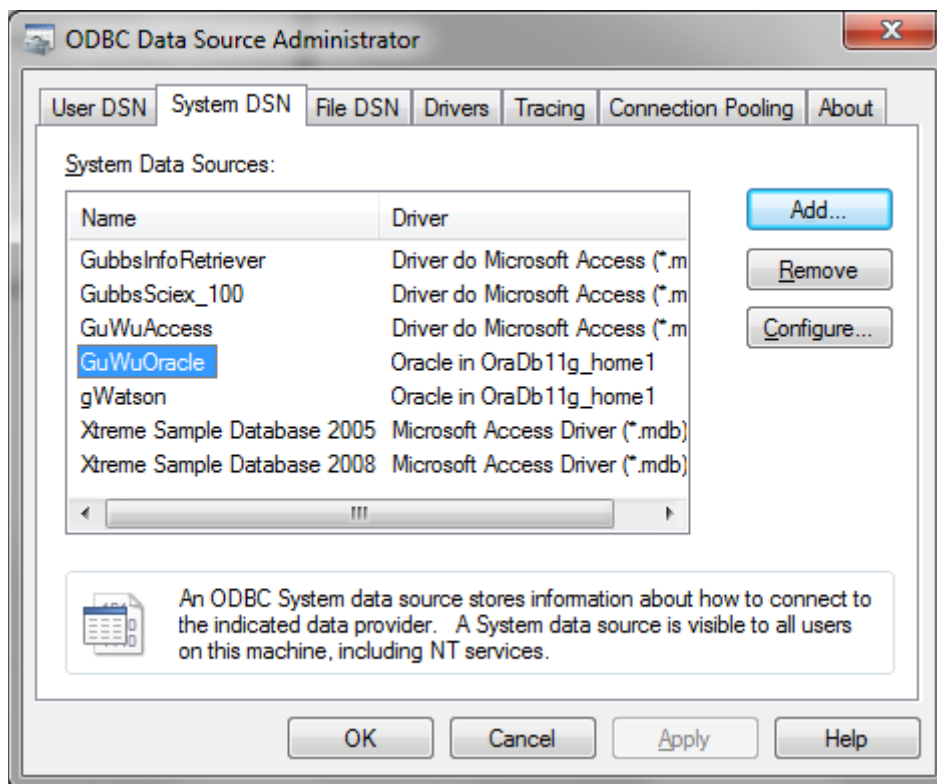


Figure 10 Watson - Oracle DSN – ODBC Data Source Administrator - Final

9 StudyDoc Database Configuration – Oracle

If Oracle is to be used as the backend database, follow the instructions in this section.

To be determined

10 StudyDoc Database Configuration – Microsoft SQL Server

If Microsoft SQL Server is to be used as the backend database, follow the instructions in this section.

To be determined

11 Database Client Installation

StudyDoc communicates to Oracle and SQL Server databases via an ODBC connection. An ODBC connection is facilitated through software called a database ODBC driver provided by the database vendor. This ODBC driver is typically called a 'client'.

11.1 Watson Oracle database connection

StudyDoc connects to the Watson Oracle database using the Oracle ODBC client driver.

If StudyDoc is configured to connect to the Watson Oracle database, then the Oracle ODBC client driver must be installed on all StudyDoc workstations.

Oracle ODBC clients can be obtained from the Oracle website.

11.2 StudyDoc database connection

11.2.1 Oracle database connection

StudyDoc connects to the StudyDoc Oracle database using the Oracle OLEDB client driver.

If StudyDoc is configured to connect to the StudyDoc Oracle database, then the Oracle OLEDB client driver must be installed on all StudyDoc workstations.

The Oracle OLEDB driver is located within the DeveloperToolsFor.Net package and may be obtained from the Oracle website.

11.2.2 SQL Server database connection

StudyDoc connects to the SQL Server database using a configuration line in the StudyDoc.ini file

12 StudyDoc_xx.ini

Setup.exe will create an .ini file named StudyDoc_01 located in the directory C:\LABINTEGRITY\StudyDoc\Ini\. The contents of the StudyDoc.ini file depends on the configuration scenario. The following show the items that need to be completed depending on the StudyDoc configuration scenario:

IMPORTANT: The LabIntegrity Password Encryption Tool (see Section 13) **MUST** be used to encrypt the password. Copy the encrypted password from the Password Encryption Tool into the Pswd portion of the .ini file (*remember to include the trailing space in the encrypted password obtained from the Encryption Tool*).

12.1 Watson archived .mdb's and StudyDoc Access database, stand-alone workstation

The main concern here is to enter the path of the StudyDoc_01.mdb database in Line 1.

Item	Value
ConnectionStringGuWuAccess	Provider=Microsoft.Jet.OLEDB.4.0;Data Source=C:\LabIntegrity\StudyDoc\MDBDatabase\StudyDoc_01.mdb;
ConnectionStringGuWu	IGNORED
ConnectionStringGuWuODBC	IGNORED
ConnectionStringWatson	IGNORED
ConnectionStringWatsonANSI	IGNORED
ConnectionStringWatsonAccess	IGNORED
boolAccess	TRUE
bool64	IGNORED
boolGuWuAccess	TRUE
boolGuWuSQLServer	FALSE
boolGuWuOracle	FALSE
REM GuWuUserID used if StudyDoc database is Oracle or SQL Server	
GuWuUserID	IGNORED
REM Use Gubbs PasswordEncryption application to generate encrypted password	
GuWuPassword	IGNORED
REM WatsonUserID used if Watson database is Oracle	
WatsonUserID	IGNORED
REM Use Gubbs PasswordEncryption application to generate encrypted password	
WatsonPassword	IGNORED

12.2 Watson archived .mdb's and StudyDoc Access database, multi-user environment / shared StudyDoc Access database

The main concern here is to enter the path of the StudyDoc_01.mdb database in Line 1.

Item	Value
ConnectionStringGuWuAccess	Provider=Microsoft.Jet.OLEDB.4.0;Data Source=\\filesr1\LabIntegrity\StudyDoc\MDBDatabase\StudyDoc_01.mdb;
ConnectionStringGuWu	IGNORED
ConnectionStringGuWuODBC	IGNORED
ConnectionStringWatson	IGNORED
ConnectionStringWatsonANSI	IGNORED
ConnectionStringWatsonAccess	IGNORED
boolAccess	TRUE
bool64	IGNORED
boolGuWuAccess	TRUE
boolGuWuSQLServer	FALSE
boolGuWuOracle	FALSE
REM GuWuUserID used if StudyDoc database is Oracle or SQL Server	
GuWuUserID	IGNORED
REM Use Gubbs PasswordEncryption application to generate encrypted password	
GuWuPassword	IGNORED
REM WatsonUserID used if Watson database is Oracle	
WatsonUserID	IGNORED
REM Use Gubbs PasswordEncryption application to generate encrypted password	
WatsonPassword	IGNORED

12.3 Watson Oracle database and StudyDoc Access database

NOTE: If StudyDoc is configured in a multi-user environment, then use the ‘ConnectionStringGuWuAccess’ example shown in Section 12.2)

Item	Example
ConnectionStringGuWuAccess	Provider=Microsoft.Jet.OLEDB.4.0;Data Source=C:\LabIntegrity\StudyDoc\MDBDatabase\StudyDoc_01.mdb;
ConnectionStringGuWu	IGNORED
ConnectionStringGuWuODBC	IGNORED
ConnectionStringWatson	IGNORED
ConnectionStringWatsonANSI	dsn=gwatson
ConnectionStringWatsonAccess	IGNORED
boolAccess	FALSE
bool64	FALSE
boolGuWuAccess	TRUE
boolGuWuSQLServer	FALSE
boolGuWuOracle	FALSE
REM GuWuUserID used if StudyDoc database is Oracle or SQL Server	
GuWuUserID	IGNORED
REM Use Gubbs PasswordEncryption application to generate encrypted password	
GuWuPassword	IGNORED
REM WatsonUserID used if Watson database is Oracle	
WatsonUserID	GWATSON
REM Use Gubbs PasswordEncryption application to generate encrypted password	
WatsonPassword *	201 236 212 219 197 221 163

*** NOTE: Password value MUST be created using LabIntegrityPswd.exe (see Section 13)**

12.4 Watson archived .mdb's and StudyDoc Oracle database

Item	Example
ConnectionStringGuWuAccess	IGNORED
ConnectionStringGuWu	Provider=OraOLEDB.Oracle;Data Source=STUDYDOC;Info=False;
ConnectionStringGuWuODBC	IGNORED
ConnectionStringWatson	IGNORED
ConnectionStringWatsonANSI	IGNORED
ConnectionStringWatsonAccess	IGNORED
boolAccess	TRUE
bool64	FALSE
boolGuWuAccess	FALSE
boolGuWuSQLServer	FALSE
boolGuWuOracle	TRUE
REM GuWuUserID used if StudyDoc database is Oracle or SQL Server	
GuWuUserID	StudyDoc
REM Use Gubbs PasswordEncryption application to generate encrypted password	
GuWuPassword *	201 236 212 219 197 221 163
REM WatsonUserID used if Watson database is Oracle	
WatsonUserID	IGNORED
REM Use Gubbs PasswordEncryption application to generate encrypted password	
WatsonPassword	IGNORED

*** NOTE: Password value MUST be created using LabIntegrityPswd.exe (see Section 13)**

12.5 Watson Oracle database and StudyDoc Access database

NOTE: If StudyDoc is configured in a multi-user environment, then use the 'ConnectionStringGuWuAccess' example shown in Section 12.2)

Item	Example
ConnectionStringGuWuAccess	Provider=Microsoft.Jet.OLEDB.4.0;Data Source=C:\LabIntegrity\StudyDoc\MDBDatabase\StudyDoc_01.mdb;
ConnectionStringGuWu	IGNORED
ConnectionStringGuWuODBC	IGNORED
ConnectionStringWatson	IGNORED
ConnectionStringWatsonANSI	dsn=gwatson
ConnectionStringWatsonAccess	IGNORED
boolAccess	FALSE
bool64	FALSE
boolGuWuAccess	TRUE
boolGuWuSQLServer	FALSE
boolGuWuOracle	FALSE
REM GuWuUserID used if StudyDoc database is Oracle or SQL Server	
GuWuUserID	IGNORED
REM Use Gubbs PasswordEncryption application to generate encrypted password	
GuWuPassword	IGNORED
REM WatsonUserID used if Watson database is Oracle	
WatsonUserID	GWATSON
REM Use Gubbs PasswordEncryption application to generate encrypted password	
WatsonPassword	201 236 212 219 197 221 163

*** NOTE: Password value MUST be created using LabIntegrityPswd.exe (see Section 13)**

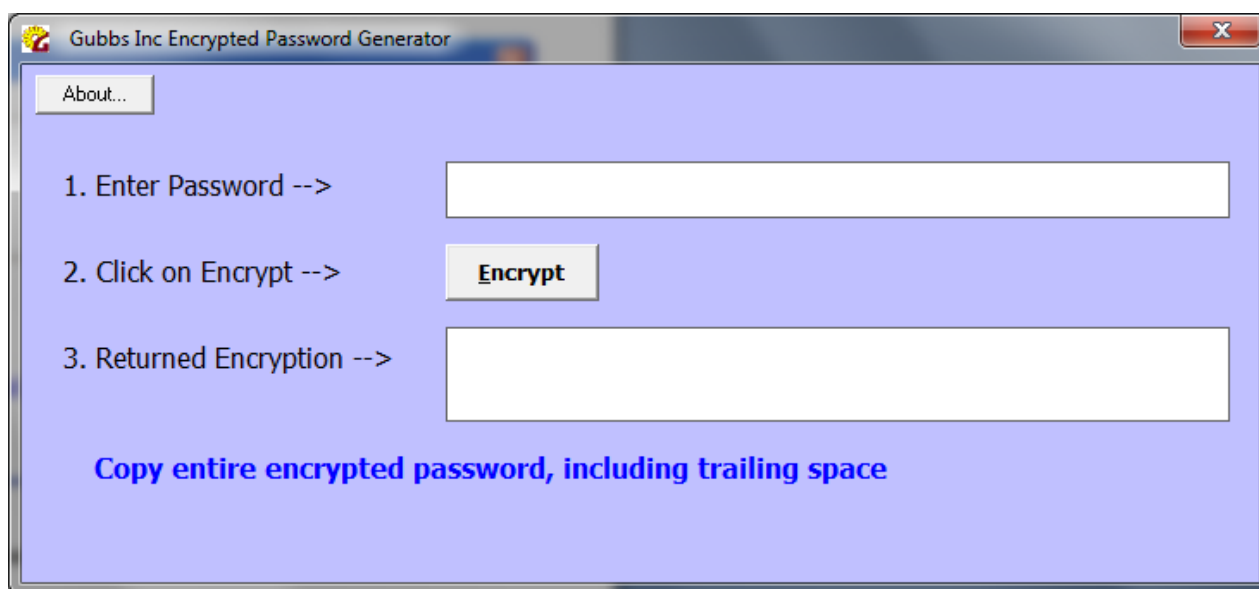
12.6 Watson Oracle database and StudyDoc SQL Server database

Item	Example
ConnectionStringGuWuAccess	IGNORED
ConnectionStringGuWu	Provider=SQLOLEDB;DATA SOURCE=GUBBSLAP07;INITIAL CATALOG=STUDYDOC_01SQL
ConnectionStringGuWuODBC	IGNORED
ConnectionStringWatson	IGNORED
ConnectionStringWatsonANSI	dsn=gwatson
ConnectionStringWatsonAccess	IGNORED
boolAccess	FALSE
bool64	FALSE
boolGuWuAccess	TRUE
boolGuWuSQLServer	FALSE
boolGuWuOracle	FALSE
REM GuWuUserID used if StudyDoc database is Oracle or SQL Server	
GuWuUserID	IGNORED
REM Use Gubbs PasswordEncryption application to generate encrypted password	
GuWuPassword	IGNORED
REM WatsonUserID used if Watson database is Oracle	
WatsonUserID	GWATSON
REM Use Gubbs PasswordEncryption application to generate encrypted password	
WatsonPassword	201 236 212 219 197 221 163

*** NOTE: Password value MUST be created using LabIntegrityPswd.exe (see Section 13)**

13 LabIntegrity Password Encryption Tool

Setup will place an application named LabIntegrityPswd.exe in the installation directory (may be accessed through the Windows-Start-All Programs-LabIntegrity-StudyDoc program window). Open this application to display the LabIntegrity Password Encryption Tool. Copy the encrypted password to the .ini file if necessary (remember to include the trailing space in the encrypted password obtained from the Encryption Tool).



14 StudyDoc Oracle Database Creation and Configuration

To be determined

15 Installation of Database Clients

Install the Oracle and/or Microsoft SQL Server Clients according to instructions provided with the software.

16 Watson UserID Creation for StudyDoc Use

In order for StudyDoc to communicate with the Watson Oracle database, a read-only Oracle account must be generated to have access to the Watson schema.

For the purposes of this instruction, a suggested user name and password will be used; however, the IT rep is free to use any user name and/or password. This user name and password will be configured in the StudyDoc.ini file (see Section 12) if communication with the Watson Oracle database is desired.

- Using an Oracle communication tool (e.g. SQL Developer or SQL Plus), log on to Oracle as a system administrator or database administrator
- Execute the following line of code to create a new user called 'STUDYDOCWATSON' with the password 'LabIntegritywatson'

create user STUDYDOCWATSON identified by LabIntegritywatson

- Execute the following line of code grant read-only permissions to STUDYDOCWATSON

```
grant select on WATSON to STUDYDOCWATSON
```

NOTE: It is assumed the Watson database schema is called WATSON. If not, the modify the above line to reflect the actual schema name of the Watson database.

17 Database Table Structures and Definitions

To be determined

18 References

None