

|                |   |         |       |      |          |      |          |
|----------------|---|---------|-------|------|----------|------|----------|
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## How to use SQL CE client to connect to SQL server?

Applies to:

| Platform         | OS version   | WinPAC/ViewPAC utility version |
|------------------|--------------|--------------------------------|
| WP-8x3x/ XP-8x4x | All versions | All versions                   |
| WP-5000          | All versions | All versions                   |
| VP-23W1/ VP-25W1 | All versions | All versions                   |
| VP-4131          | All versions | All versions                   |

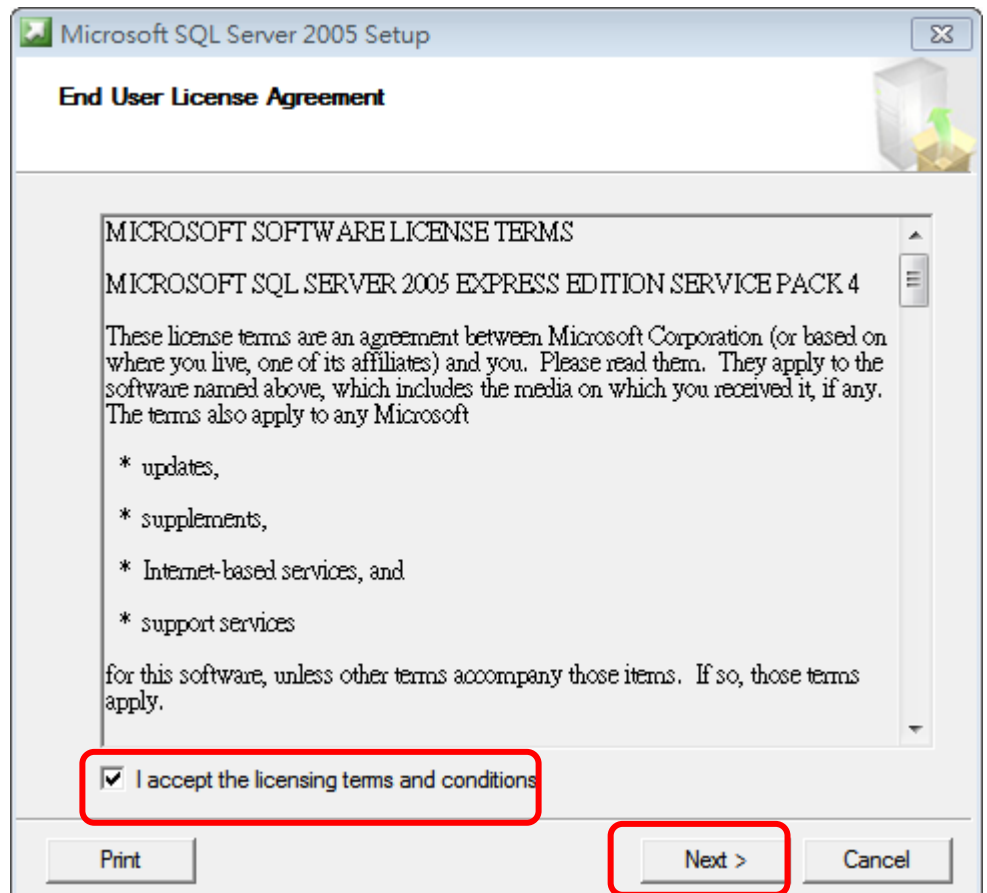
We take 2 file “SQL Server 2005 Express Edition” and “SQL Server Management Studio Express” for example, you also use other edition.

1. SQL Server 2005 Express Edition Service Pack 4 (SQLEXPRESS.EXE)  
<http://www.microsoft.com/downloads/en/details.aspx?displaylang=en&FamilyID=26435597-b28e-4568-9d16-017bdf47abdc>
2. SQL Server Management Studio Express Service Pack 4 (SQLServer2005\_SSMSEE.msi)  
<http://www.microsoft.com/downloads/en/details.aspx?displaylang=en&FamilyID=76ea83da-4797-4f11-a834-456ee9dc3764>

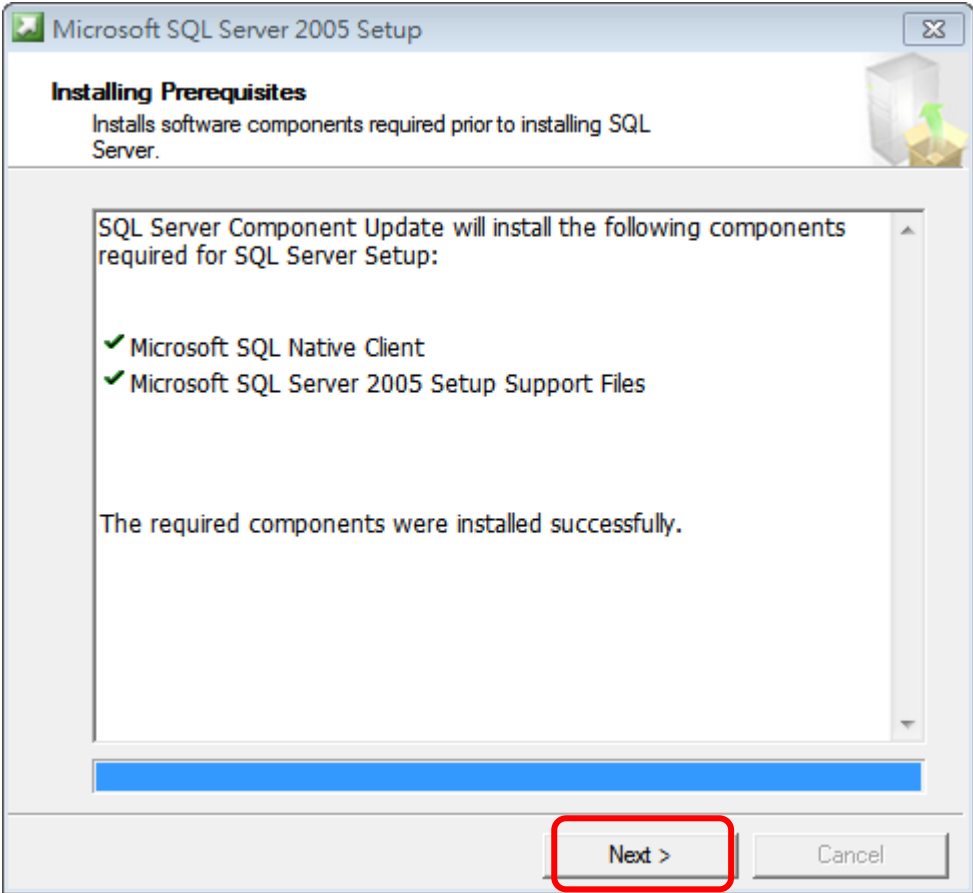
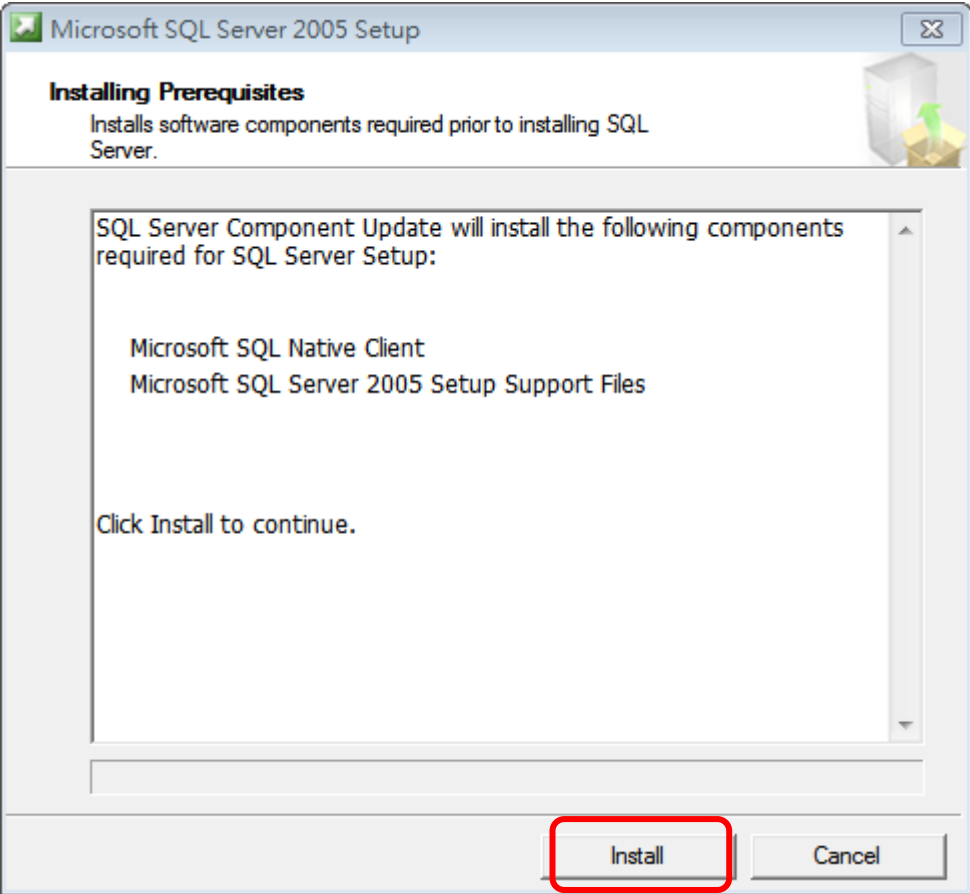
### [Install Software]

STEP 1: Install SQL Server 2005 Express Edition

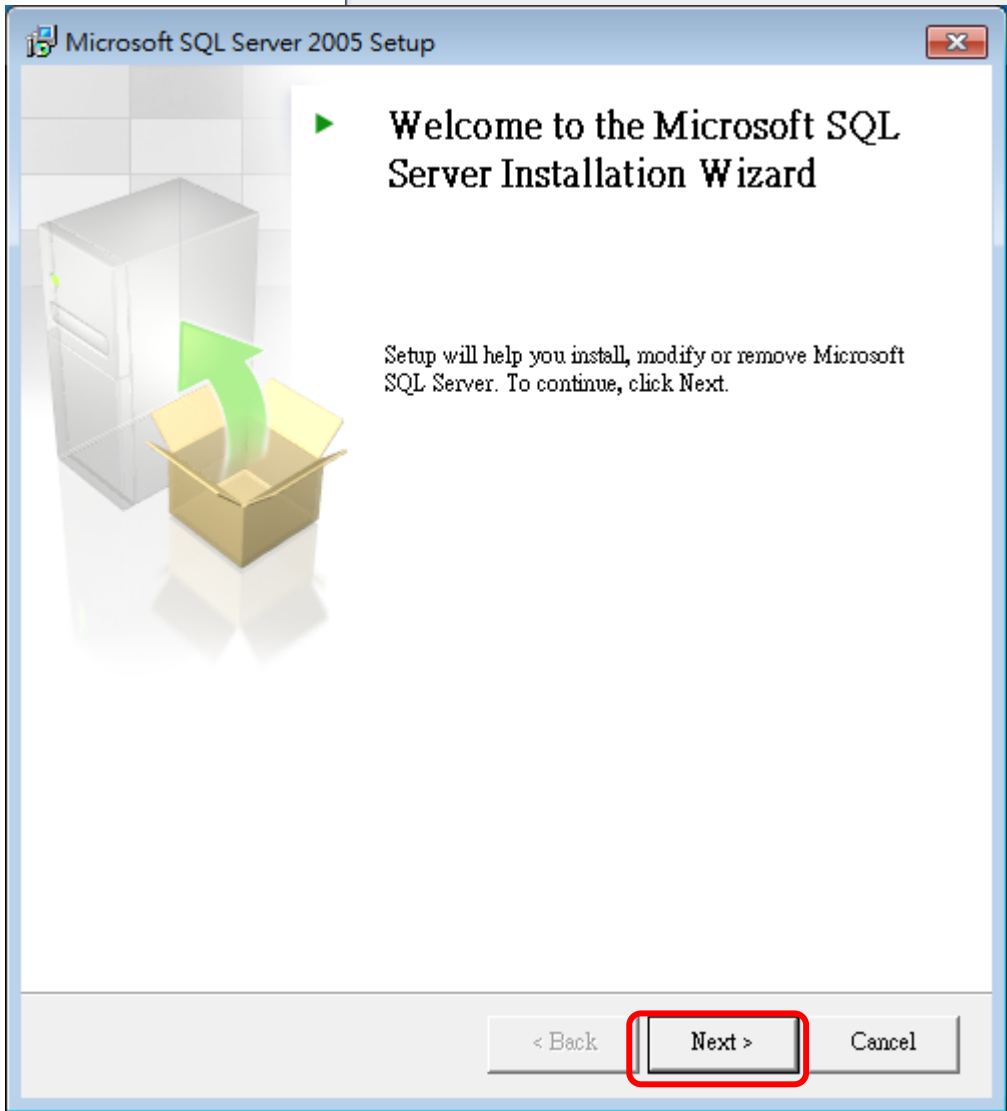
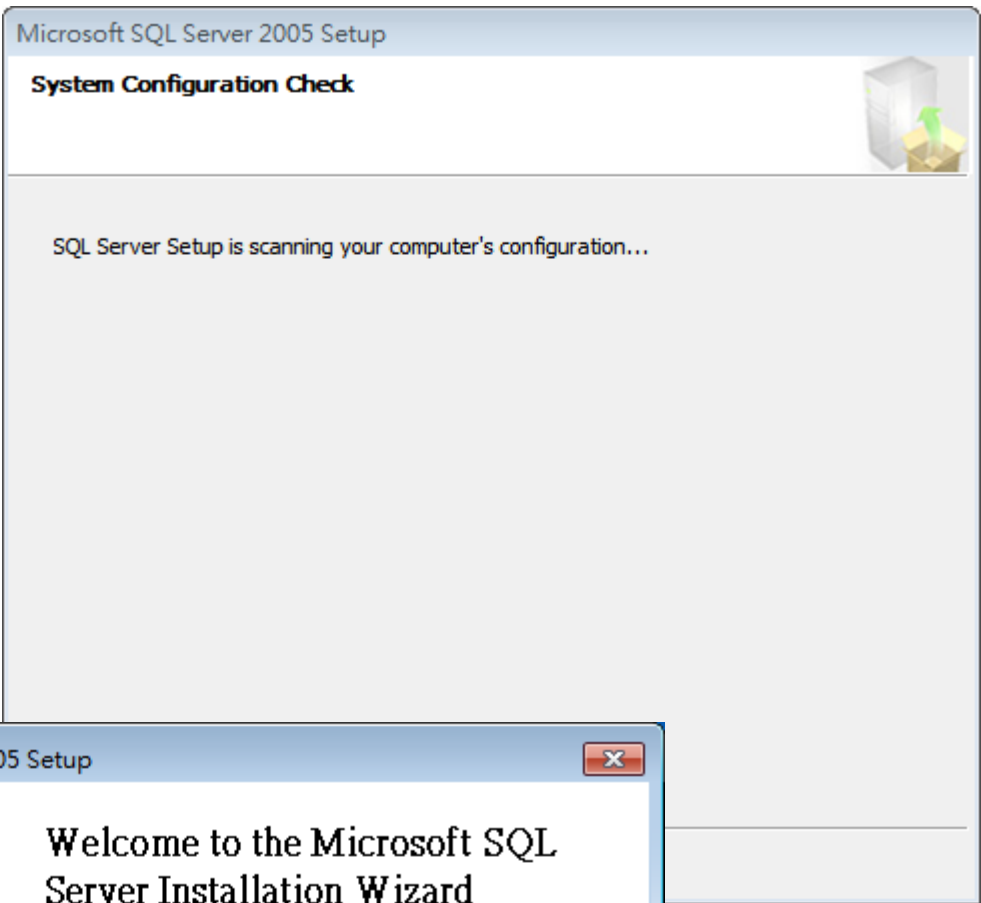
There are two places need to be adjusted.



|                |   |         |       |      |          |          |      |
|----------------|---|---------|-------|------|----------|----------|------|
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| Author         | Cid                                     | Version | 1.0.0 | Date | 2011/5/4 | Page     | 4/24 |

**Microsoft SQL Server 2005 Setup**

**System Configuration Check**  
Wait while the system is checked for potential installation problems.

**Success** 13 Total 0 Error  
13 Success 0 Warning

Details:

| Action                                     | Status  | Message |
|--|---------|---------|
| SQL Server Edition Operating System ...    | Success |         |
| Minimum Hardware Requirement               | Success |         |
| Pending Reboot Requirement                 | Success |         |
| Default Installation Path Permission Re... | Success |         |
| Internet Explorer Requirement              | Success |         |
| COM Plus Catalog Requirement               | Success |         |
| ASP.Net Version Registration Require...    | Success |         |
| Minimum MDAC Version Requirement           | Success |         |
| Edition Change Check                       | Success |         |

Filter Stop Report

Help **Next >**

**Microsoft SQL Server 2005 Setup**

**Registration Information**  
The following information will be used to register the software.

The Name field must be filled in prior to proceeding. The Company field is optional.

Name:

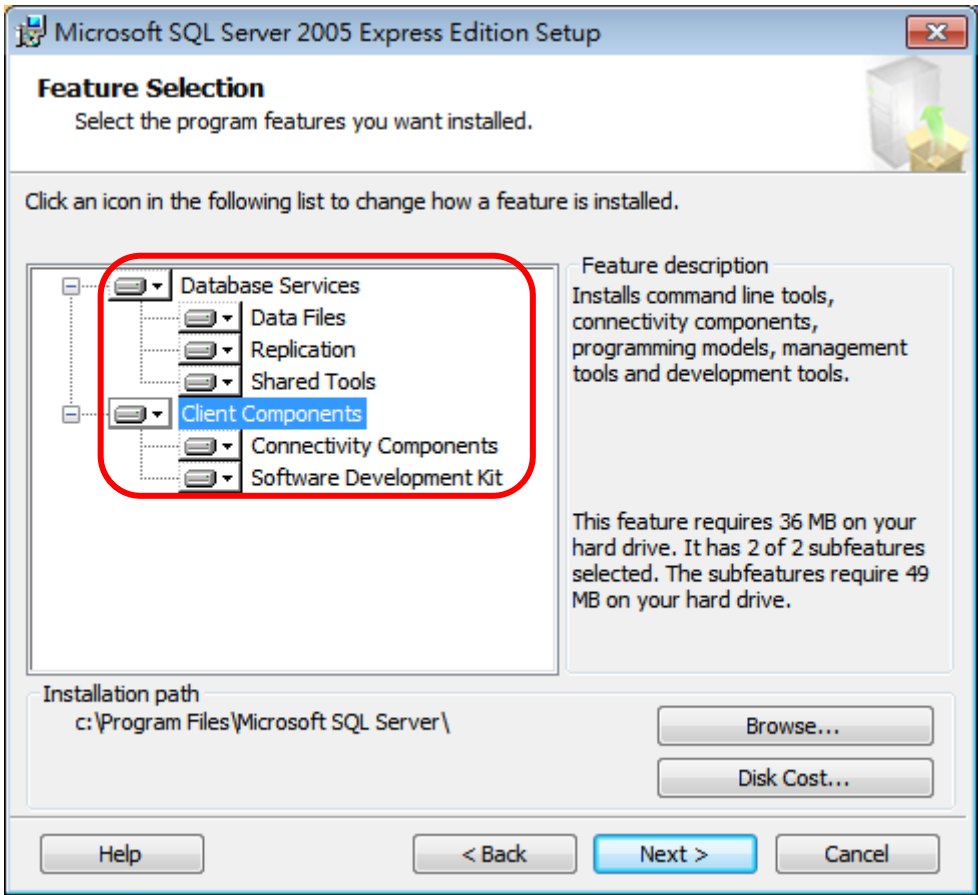
Company:

Hide advanced configuration options

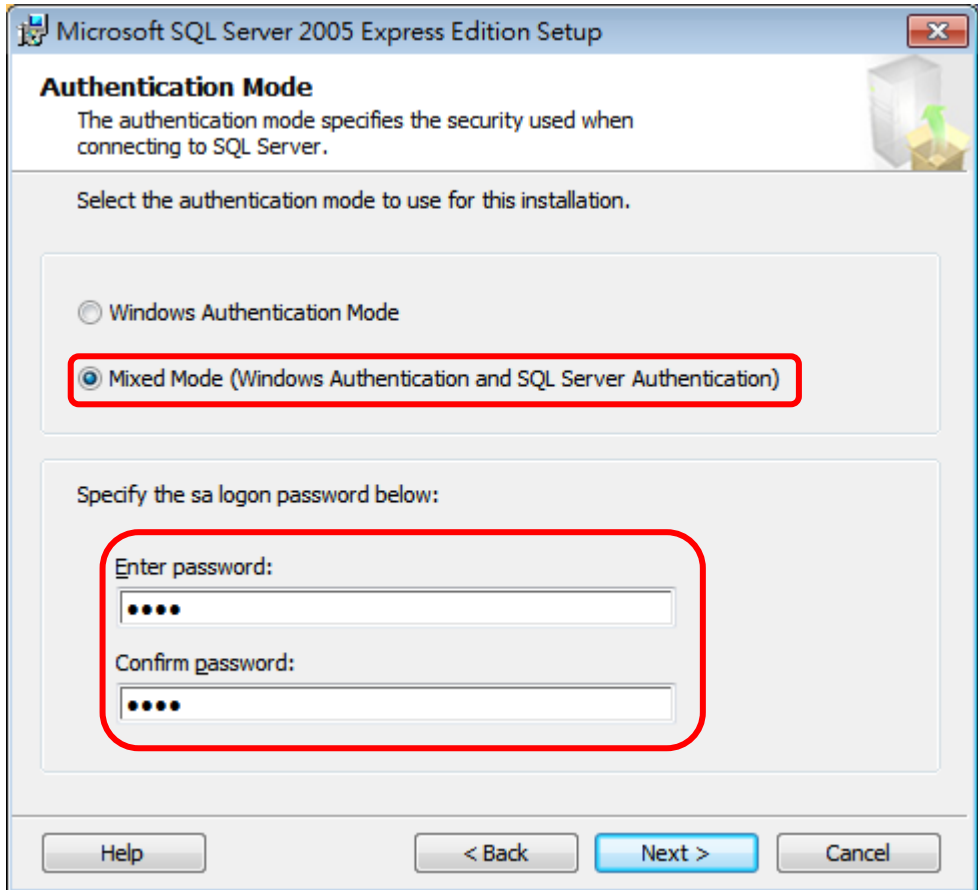
Help **Next >** Cancel

|                |   |         |       |      |          |          |      |
|----------------|---|---------|-------|------|----------|----------|------|
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| Author         | Cid                                     | Version | 1.0.0 | Date | 2011/5/4 | Page     | 5/24 |

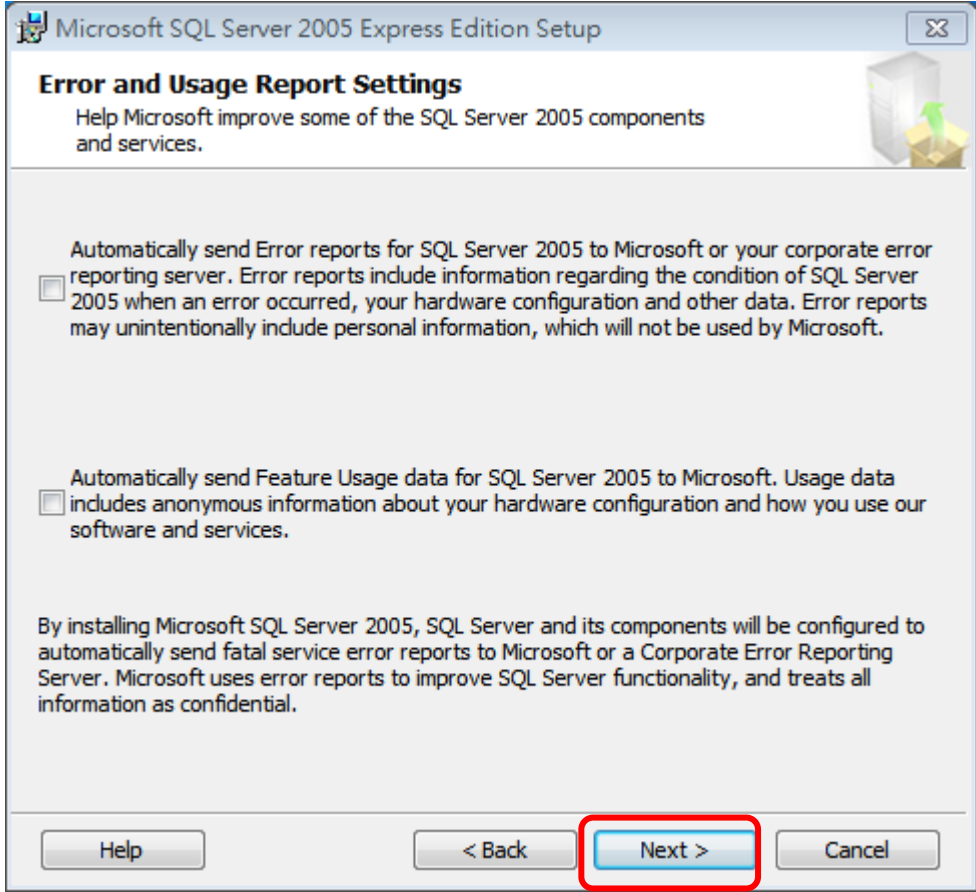
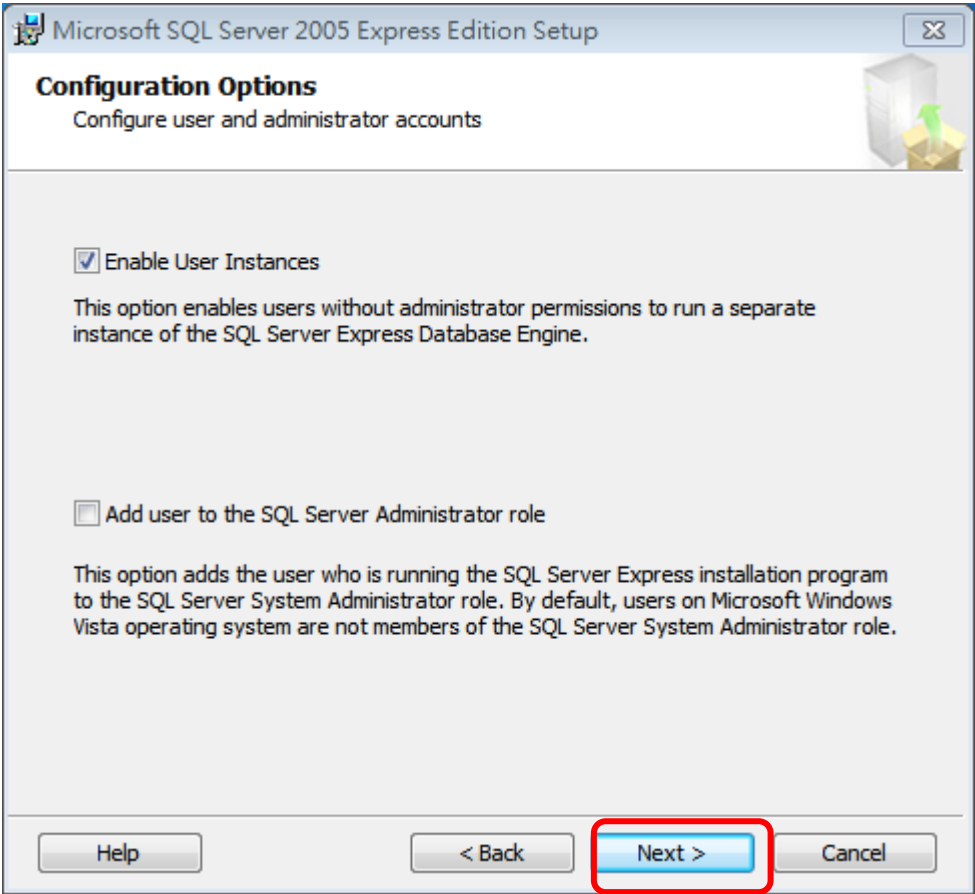
STEP 1.1: Select all components for Install.



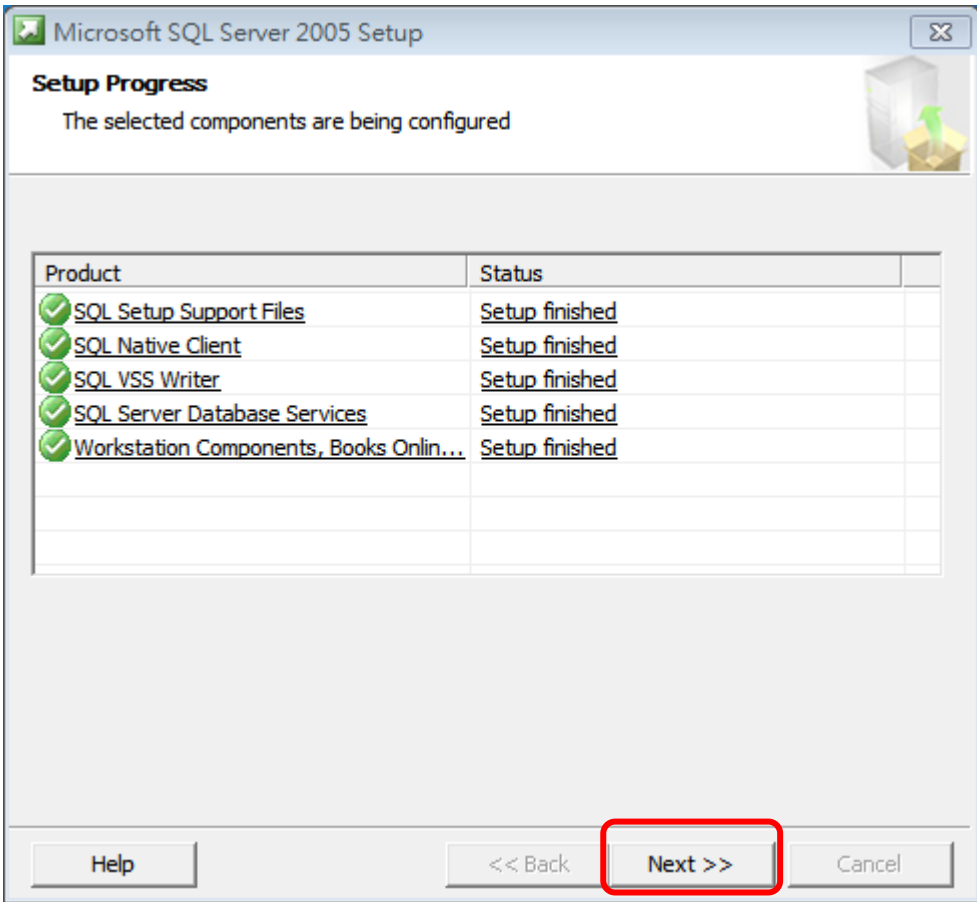
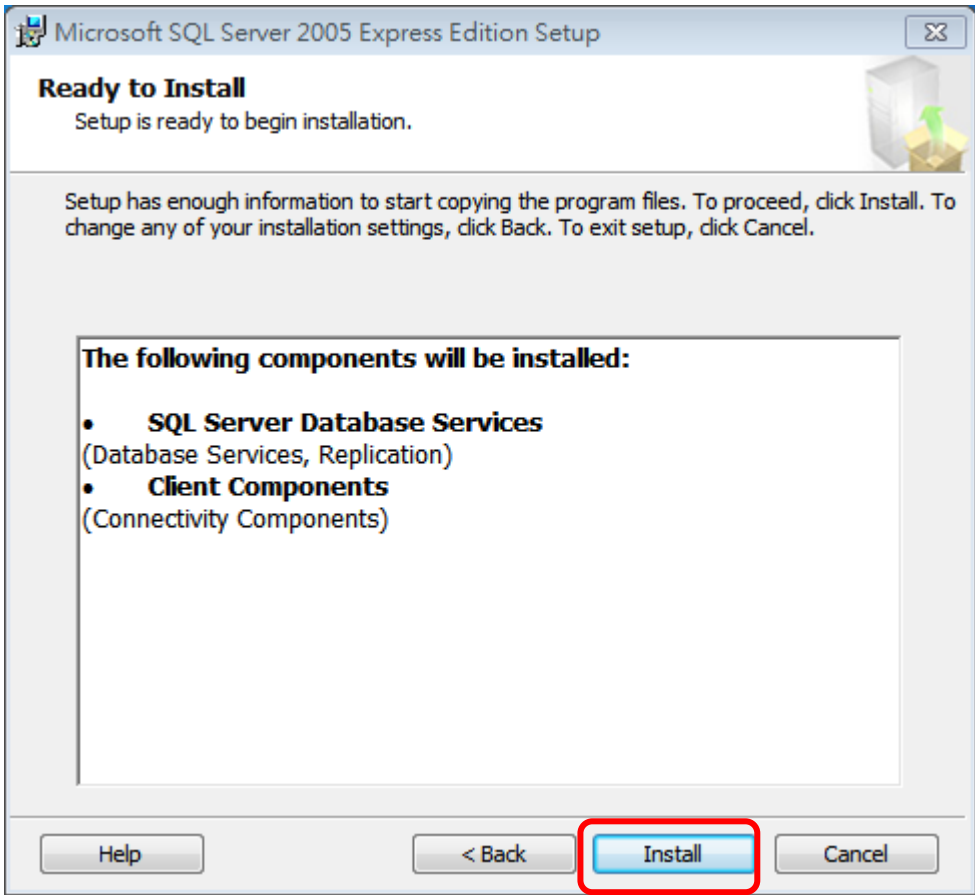
STEP 1.2: Choose “Mixed mode” and set the password. Please remember the password which will be used in the following steps.



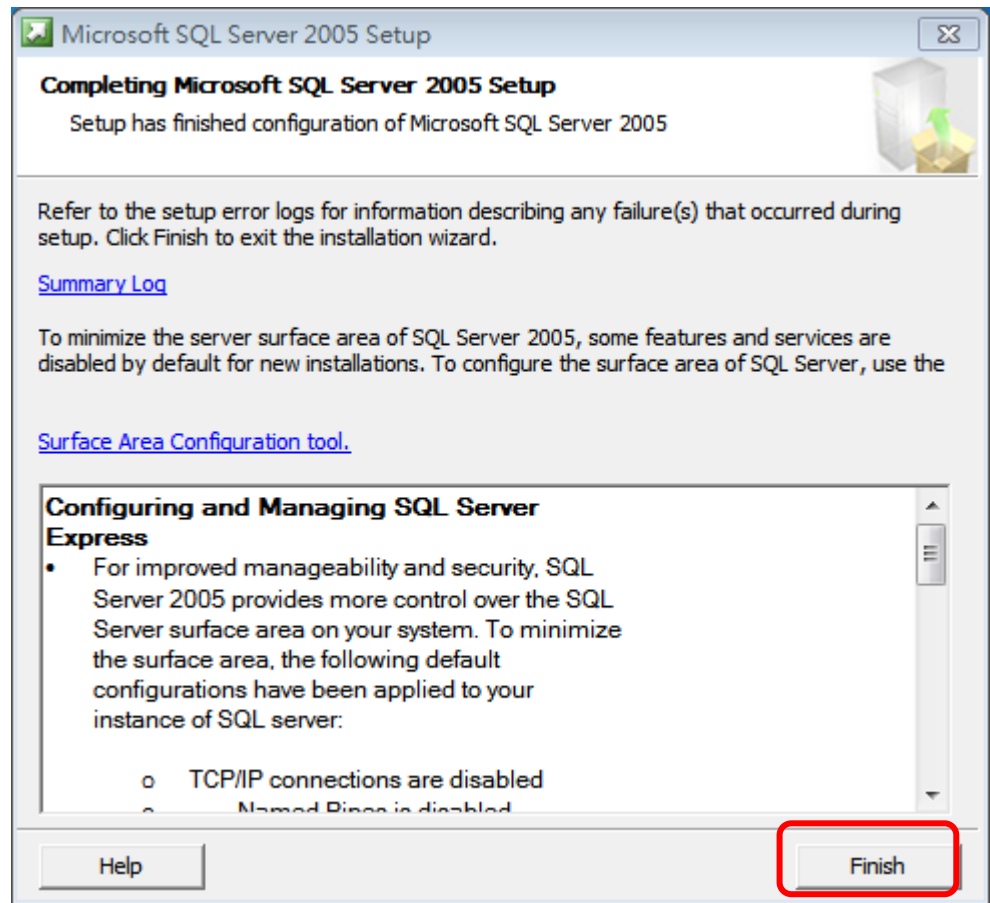
|                |   |         |       |      |          |          |      |
|----------------|---|---------|-------|------|----------|----------|------|
| Classification | System and Application FAQ on WinCE PAC |         |       |      | No.      | 5-004-00 |      |
| Author         | Cid                                     | Version | 1.0.0 | Date | 2011/5/4 | Page     | 6/24 |



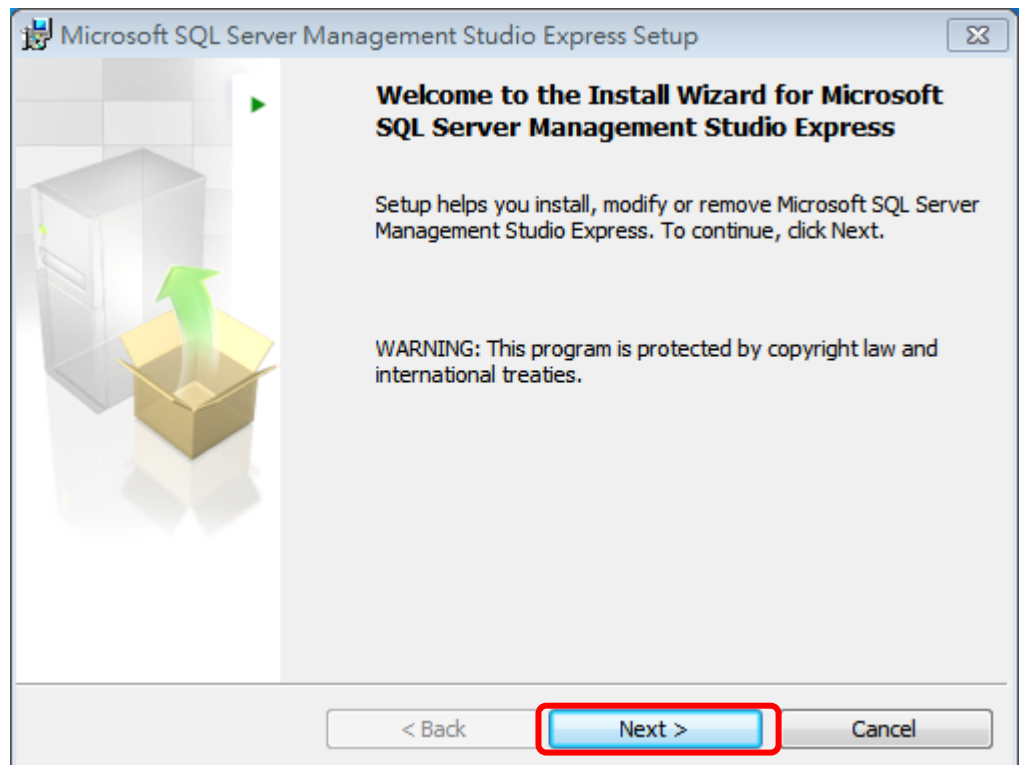
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|----------------|---|---------|-------|------|----------|----------|------|
| Classification | System and Application FAQ on WinCE PAC |         |       |      | No.      | 5-004-00 |      |
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|                |   |         |       |      |          |          |      |
|----------------|---|---------|-------|------|----------|----------|------|
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| Author         | Cid                                     | Version | 1.0.0 | Date | 2011/5/4 | Page     | 8/24 |

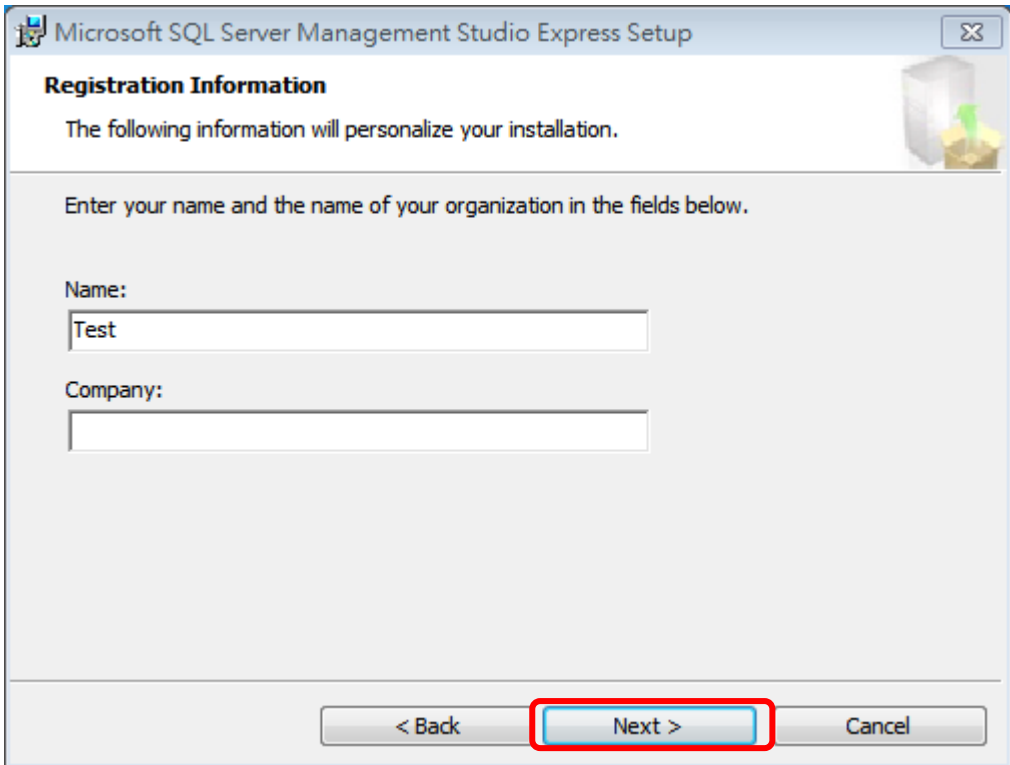
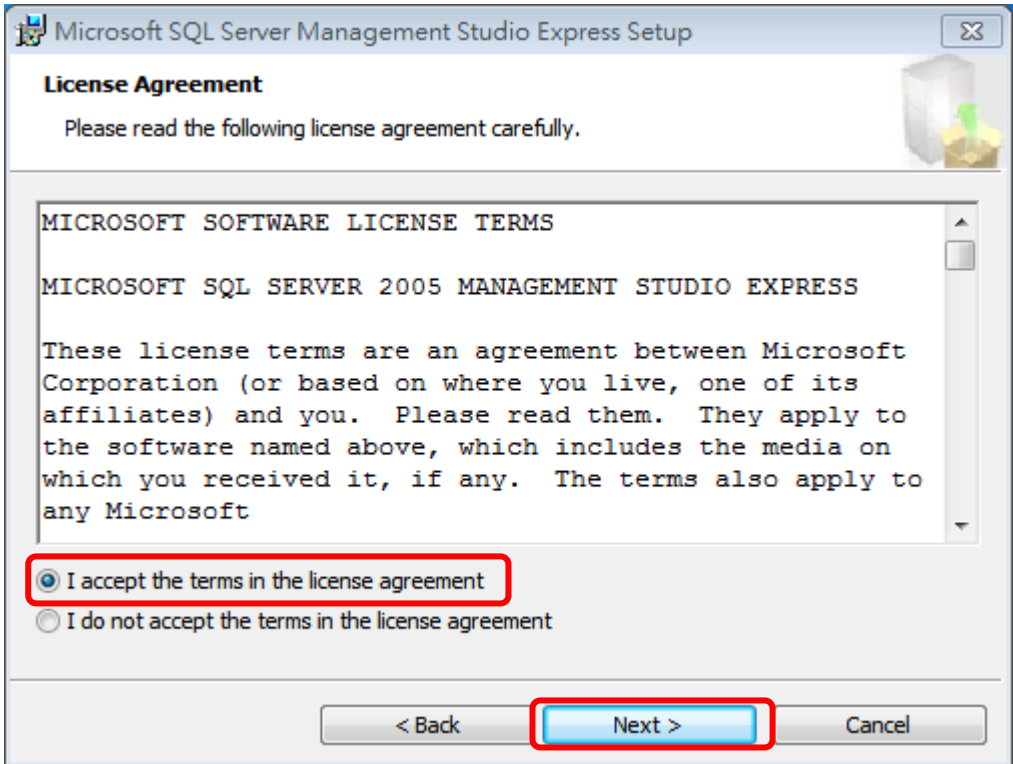


STEP 2: Install SQL Server Management Studio Express with the Setup Wizard

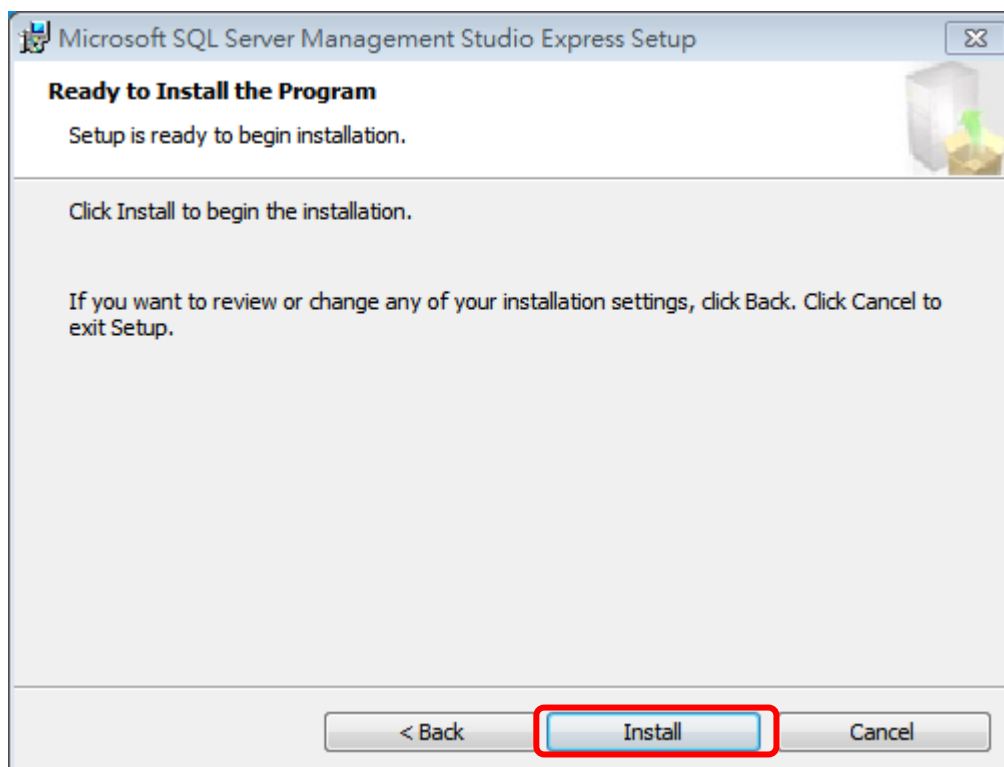
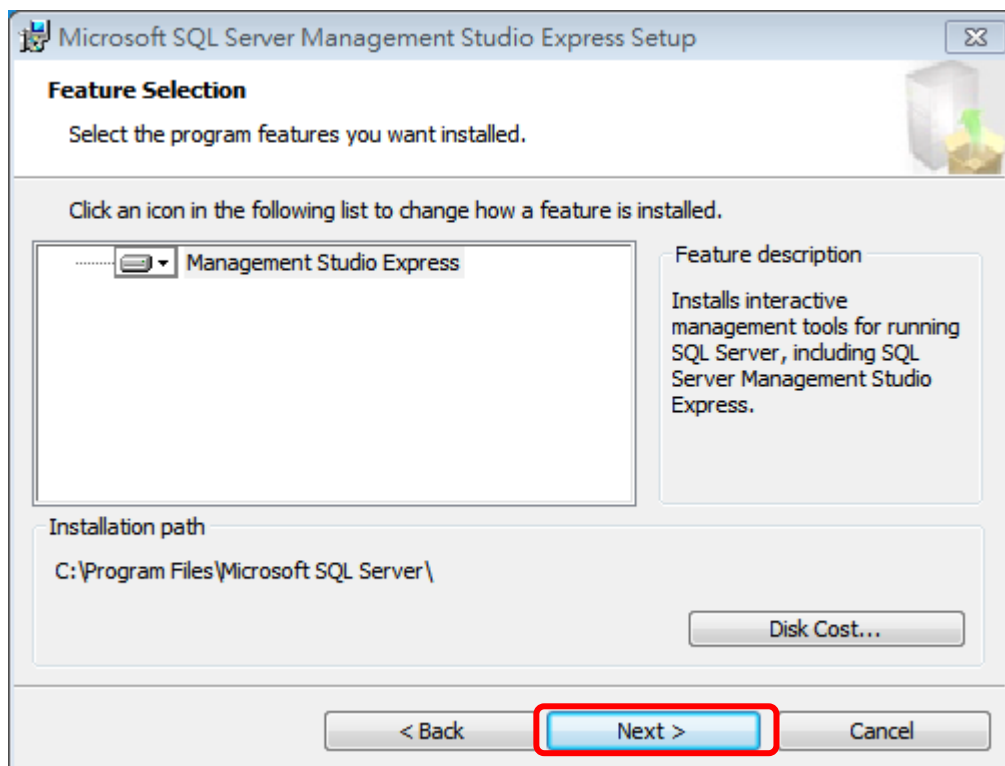




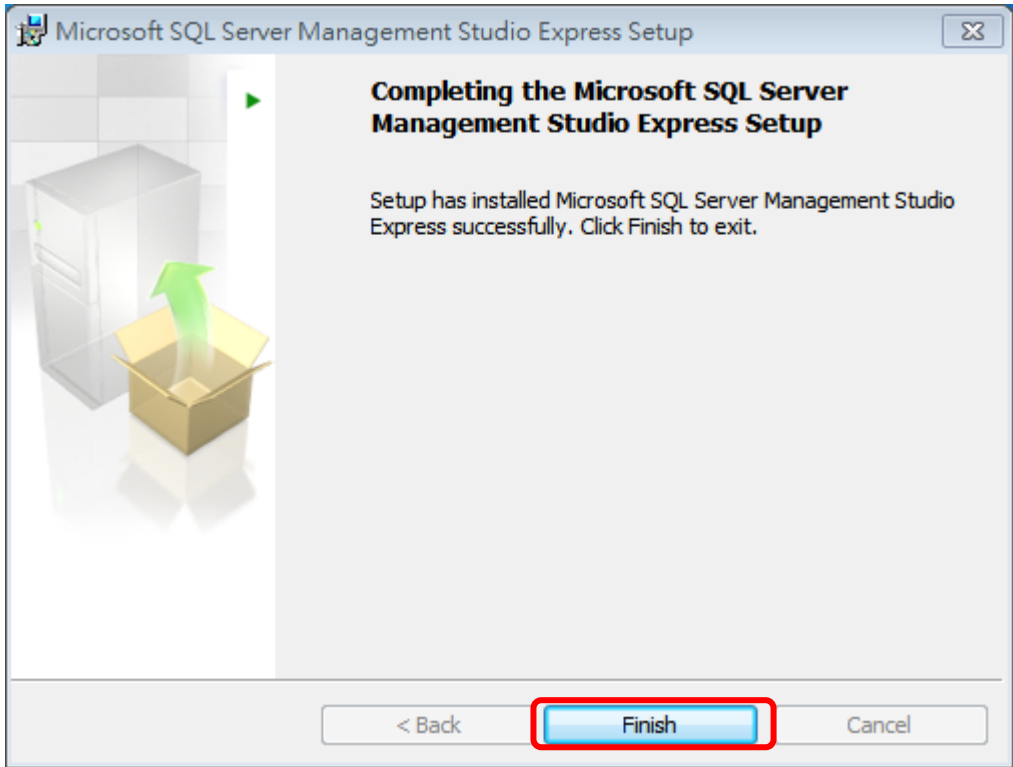
|                |   |         |       |      |          |      |          |
|----------------|---|---------|-------|------|----------|------|----------|
| Classification | System and Application FAQ on WinCE PAC |         |       |      |          | No.  | 5-004-00 |
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|                |   |         |       |      |          |      |          |
|----------------|---|---------|-------|------|----------|------|----------|
| Classification | System and Application FAQ on WinCE PAC |         |       |      |          | No.  | 5-004-00 |
| Author         | Cid                                     | Version | 1.0.0 | Date | 2011/5/4 | Page | 10/24    |



|                |   |         |       |      |          |          |       |
|----------------|---|---------|-------|------|----------|----------|-------|
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## [Config SQL Server]

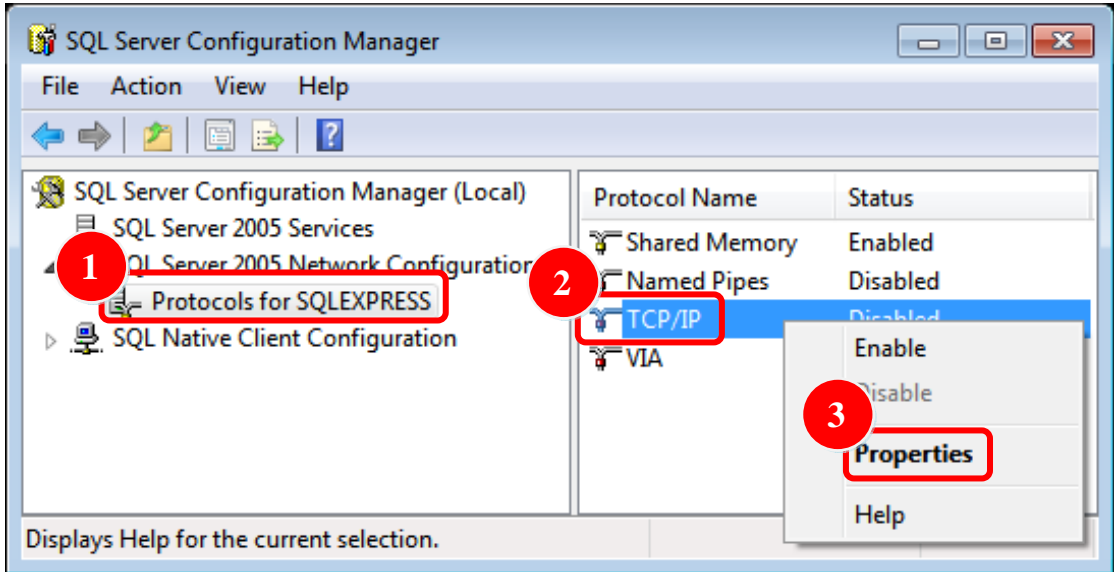
STEP 3: Execute "SQL Server Configuration Manager"

STEP 3.1: Enter "Content" to set

Part 1: Select "Potocols for SQLEXPRESS"

Part 2: Select "TCP/IP"

Part 3: Click "Content" to set



|                |   |         |       |      |          |          |       |
|----------------|---|---------|-------|------|----------|----------|-------|
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STEP 3.2: Select “Yes” for “Enabled” at tab “Protocol”

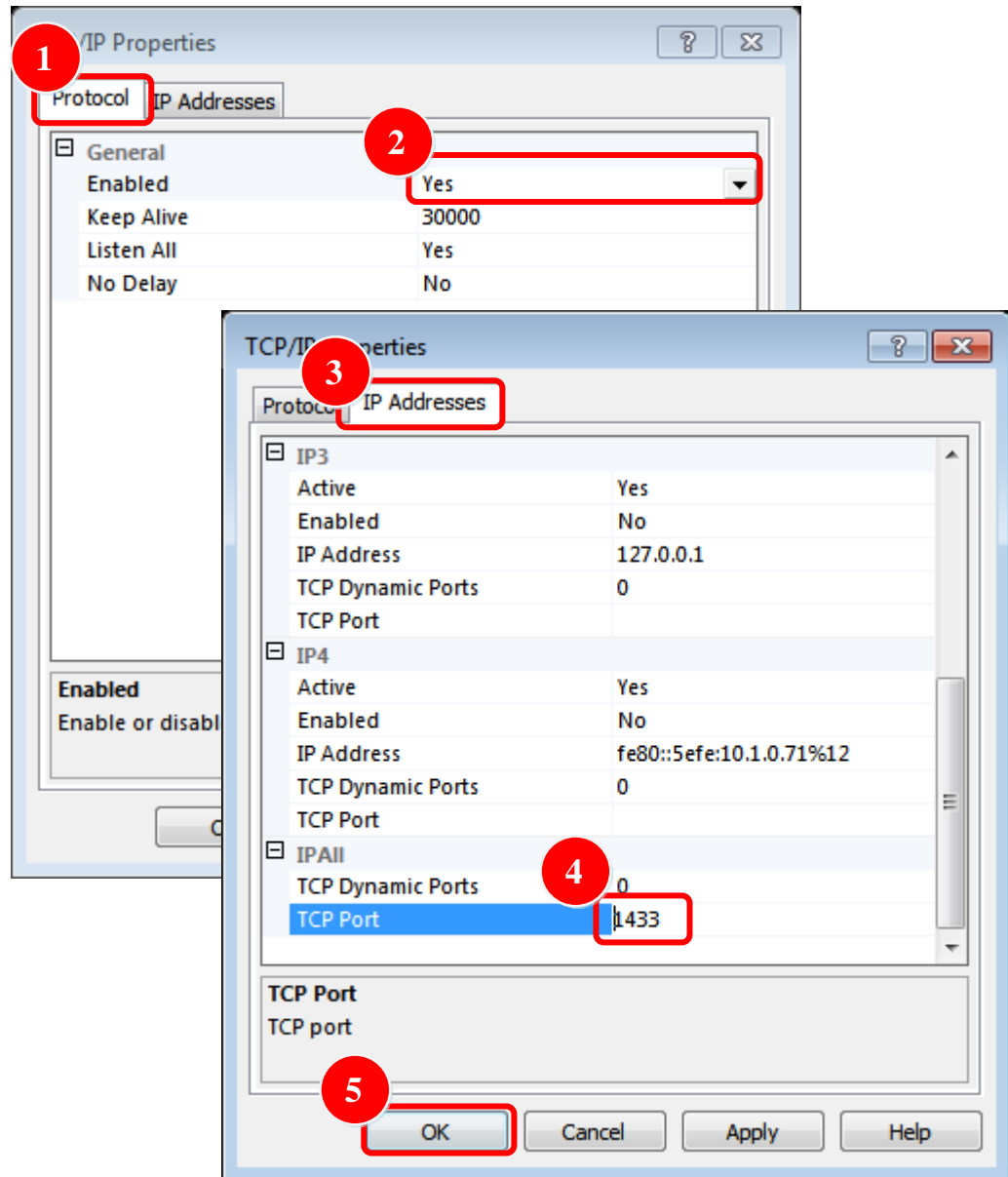
Part 1: Select tab “Protocol”

Part 2: Choose the “Enable” to “Yes”

Part 3: Select tab “IP Addresses”

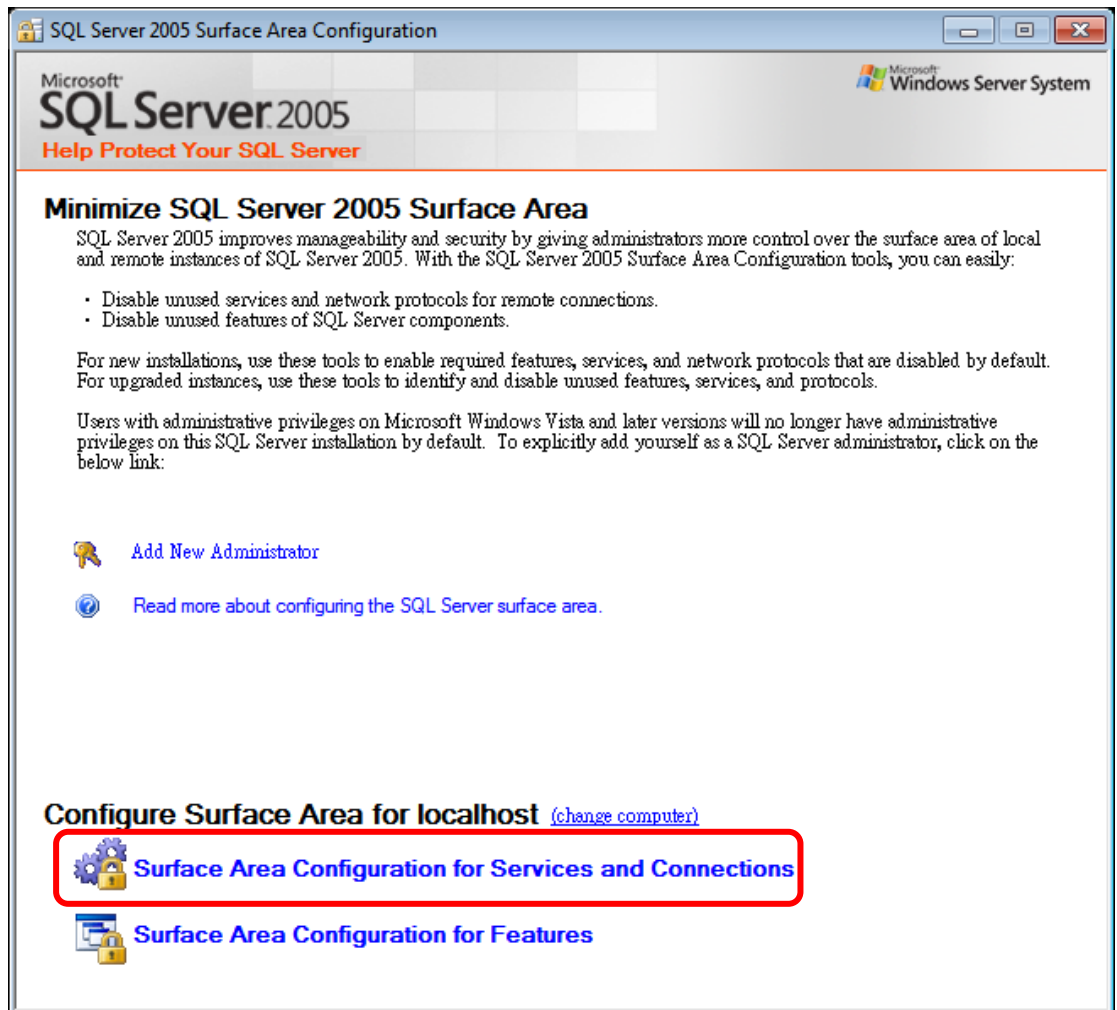
Part 4: Modify the “TCP Port” to 1433

Part 5: Click button “OK”



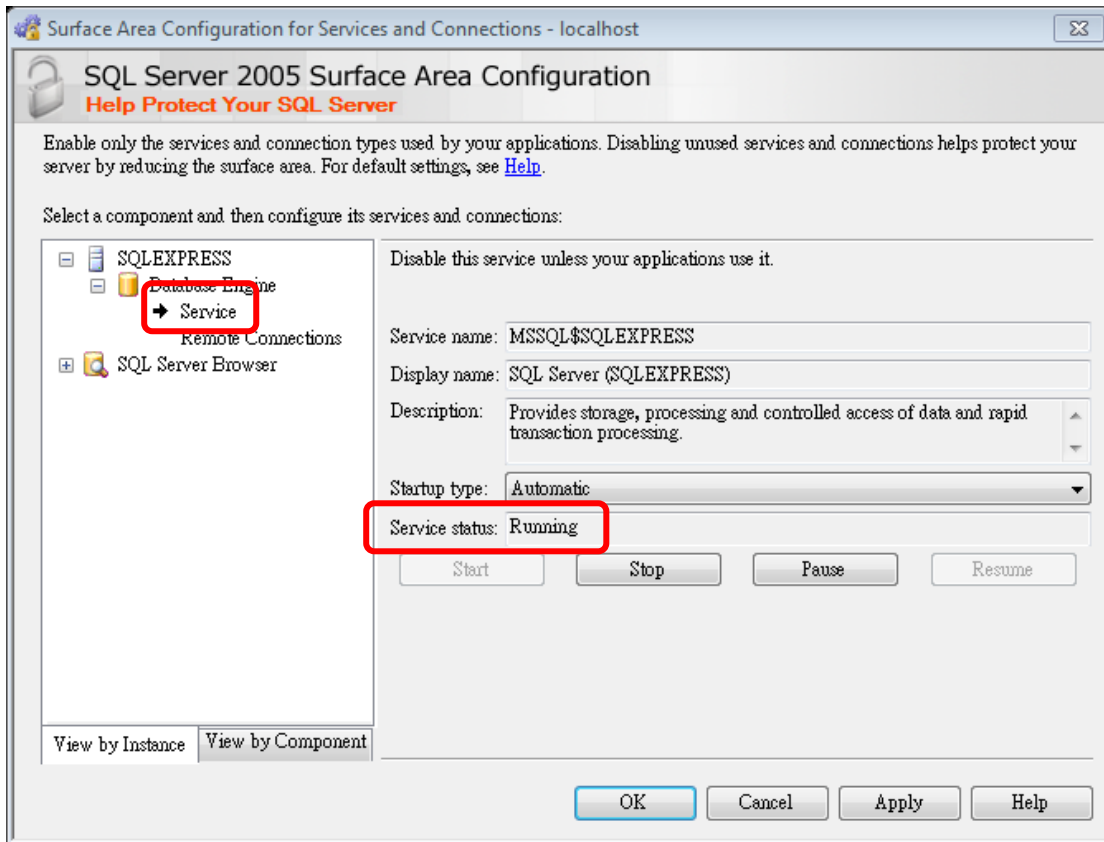
|                |   |         |       |      |          |          |       |
|----------------|---|---------|-------|------|----------|----------|-------|
| Classification | System and Application FAQ on WinCE PAC |         |       |      | No.      | 5-004-00 |       |
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STEP 4: Execute “SQL Server Surface Area Configuration” and Choose “Surface Area Configuration for Service and Connections”

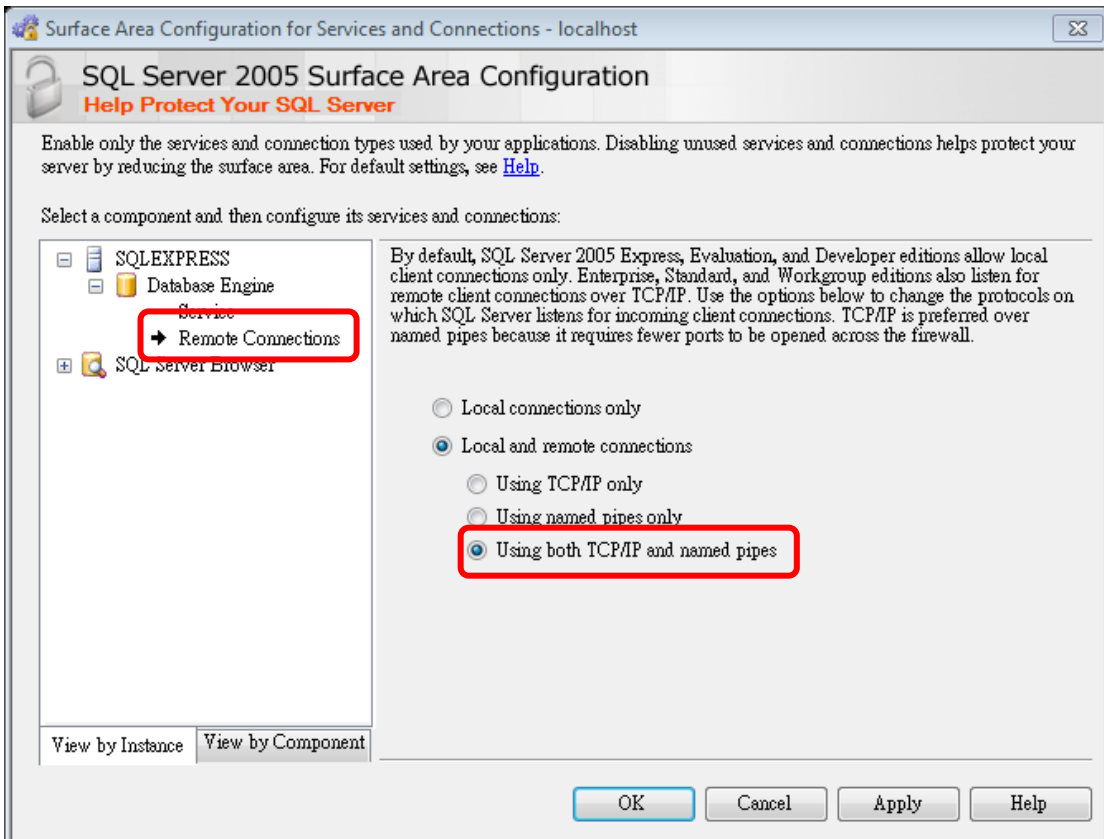


|                |   |         |       |      |          |          |       |
|----------------|---|---------|-------|------|----------|----------|-------|
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STEP 4.1: Check the “Service status” is “Running”

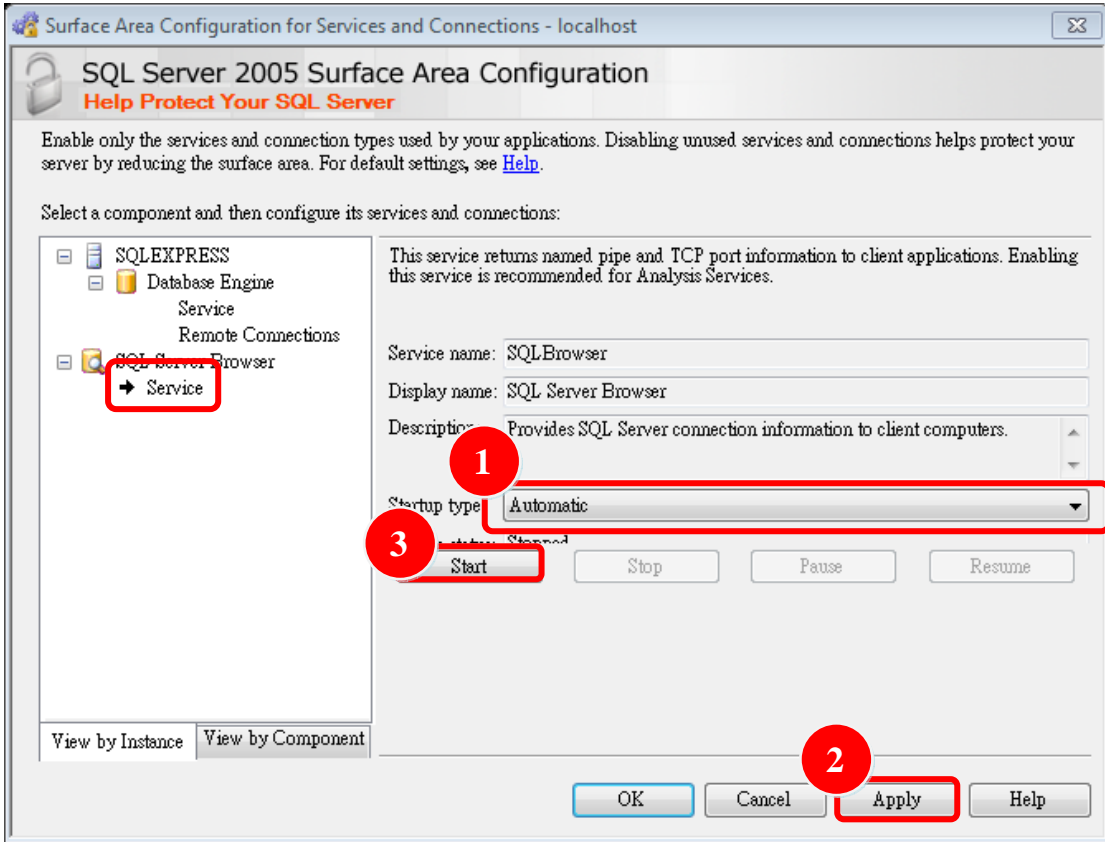


STEP 4.2: Choose the “Using both TCP/IP and named pipes”



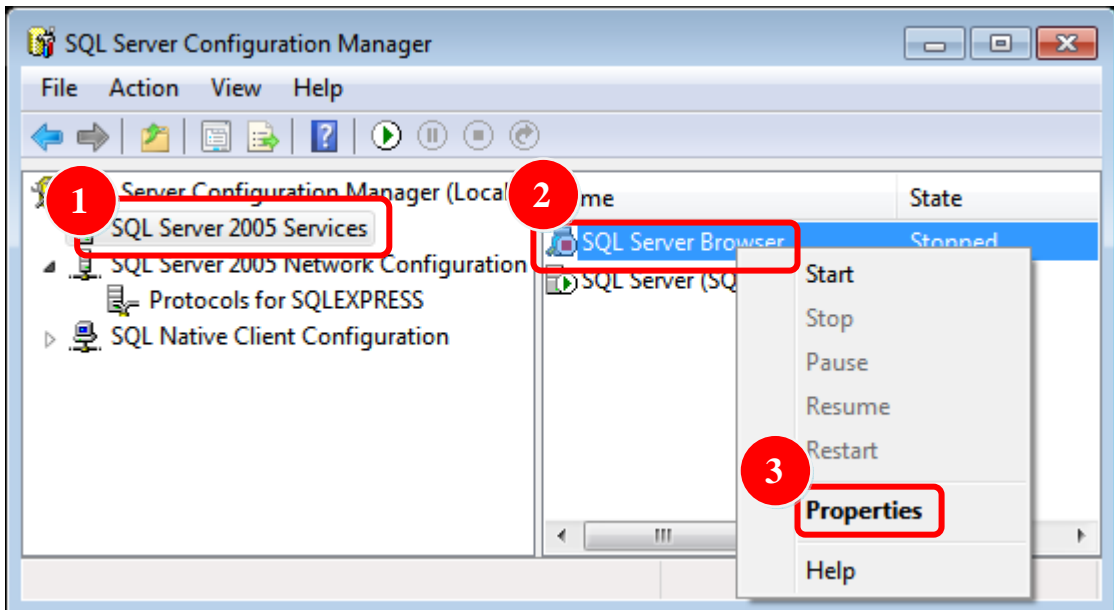
|                |   |         |       |      |          |          |       |
|----------------|---|---------|-------|------|----------|----------|-------|
| Classification | System and Application FAQ on WinCE PAC |         |       |      | No.      | 5-004-00 |       |
| Author         | Cid                                     | Version | 1.0.0 | Date | 2011/5/4 | Page     | 15/24 |

STEP 4.3: Set “Automatic” → Press “Apply” → Press “Start”



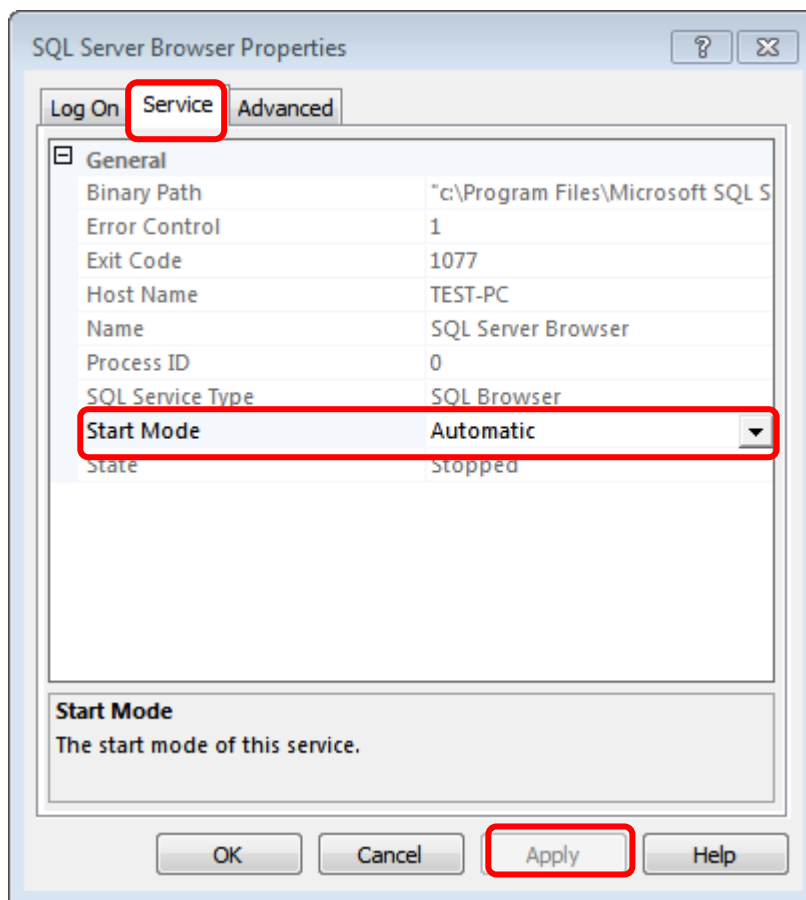
STEP 5: Execute “SQL Server Configuration Manager”

STEP 5.1: SQL Server 2005 Services → SQL Server Brower →”Content”

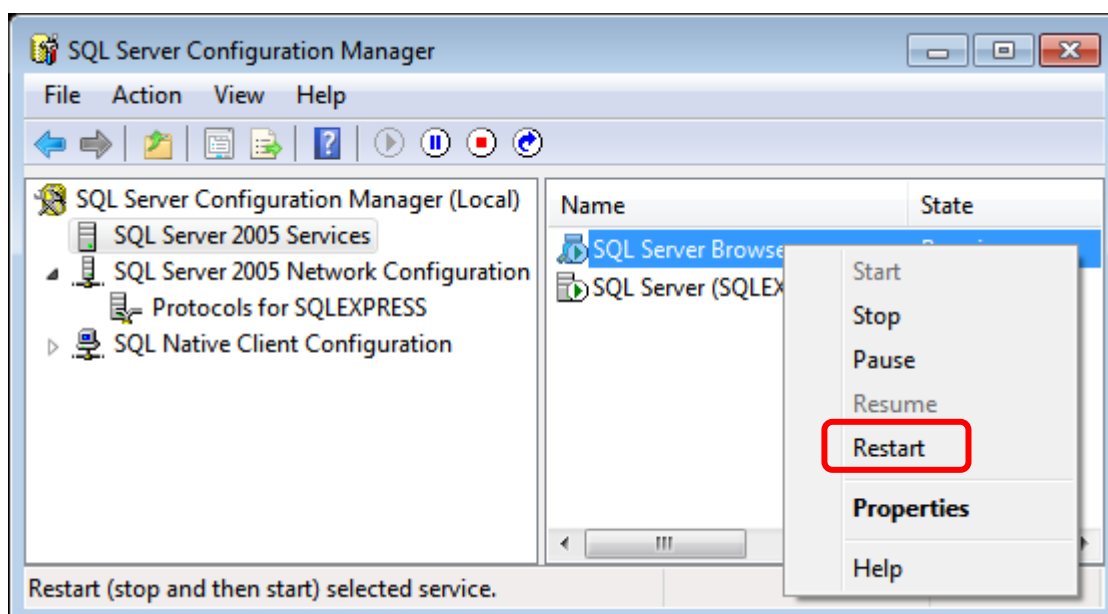


|                |   |         |       |      |          |          |       |
|----------------|---|---------|-------|------|----------|----------|-------|
| Classification | System and Application FAQ on WinCE PAC |         |       |      | No.      | 5-004-00 |       |
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STEP 5.2: Service → Set “Start Mode” to Automatic → Press “Apply” button



STEP 5.2: Restart to refresh the configurations for SQL Server Brower/SQL Server(SQLEXPRESS).



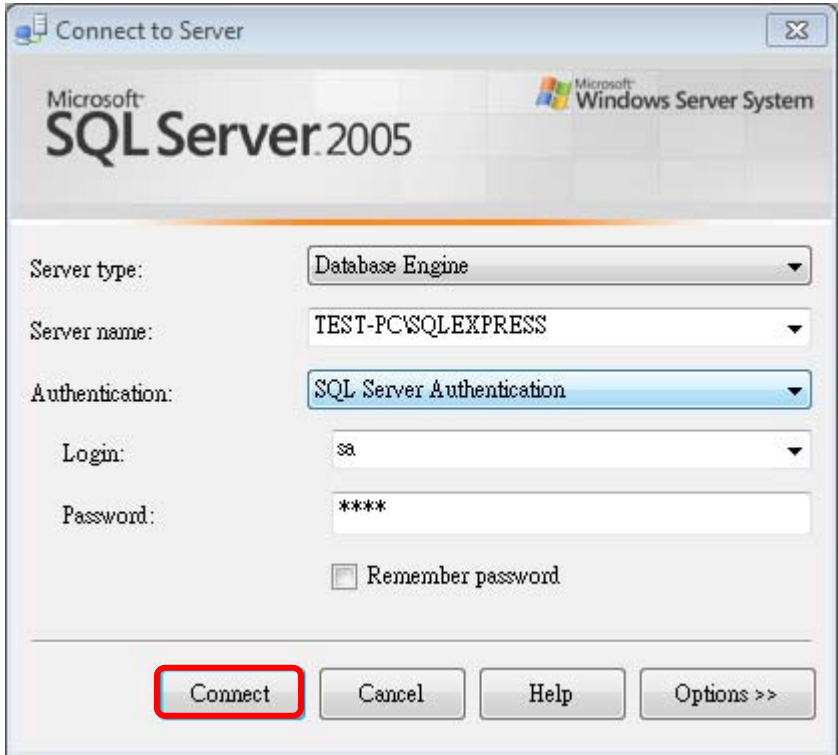


|                |   |         |       |      |          |          |       |
|----------------|---|---------|-------|------|----------|----------|-------|
| Classification | System and Application FAQ on WinCE PAC |         |       |      | No.      | 5-004-00 |       |
| Author         | Cid                                     | Version | 1.0.0 | Date | 2011/5/4 | Page     | 17/24 |

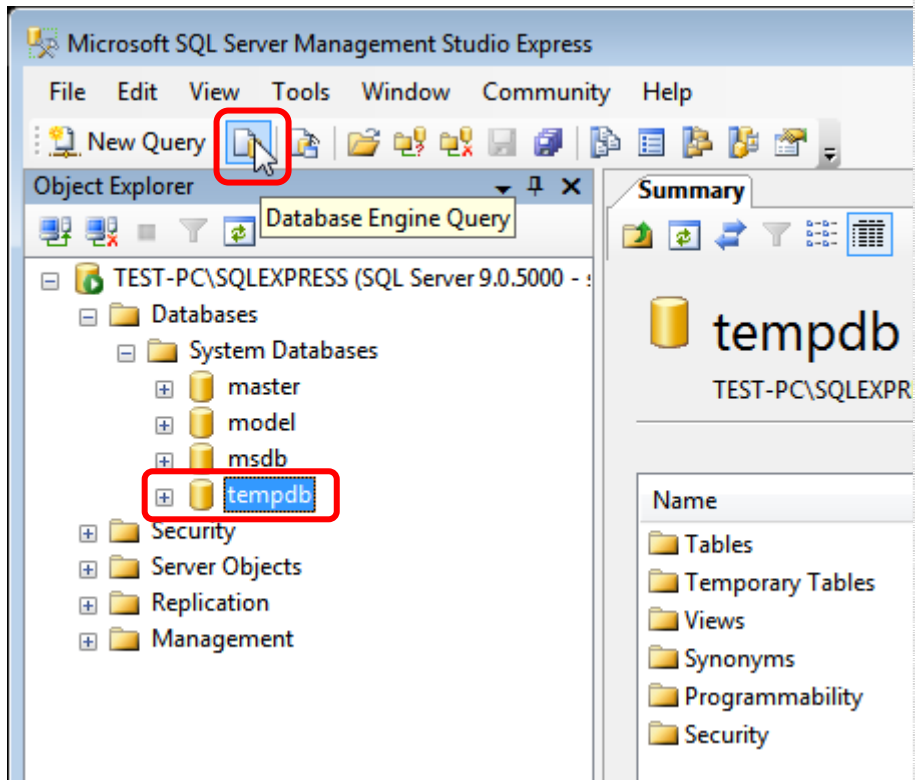
## [Create Database]

STEP 6: Execute “SQL Server Management Studio Express”

STEP 6.1: The Login “sa” is administrator, and enter the password that is set in Step1.2

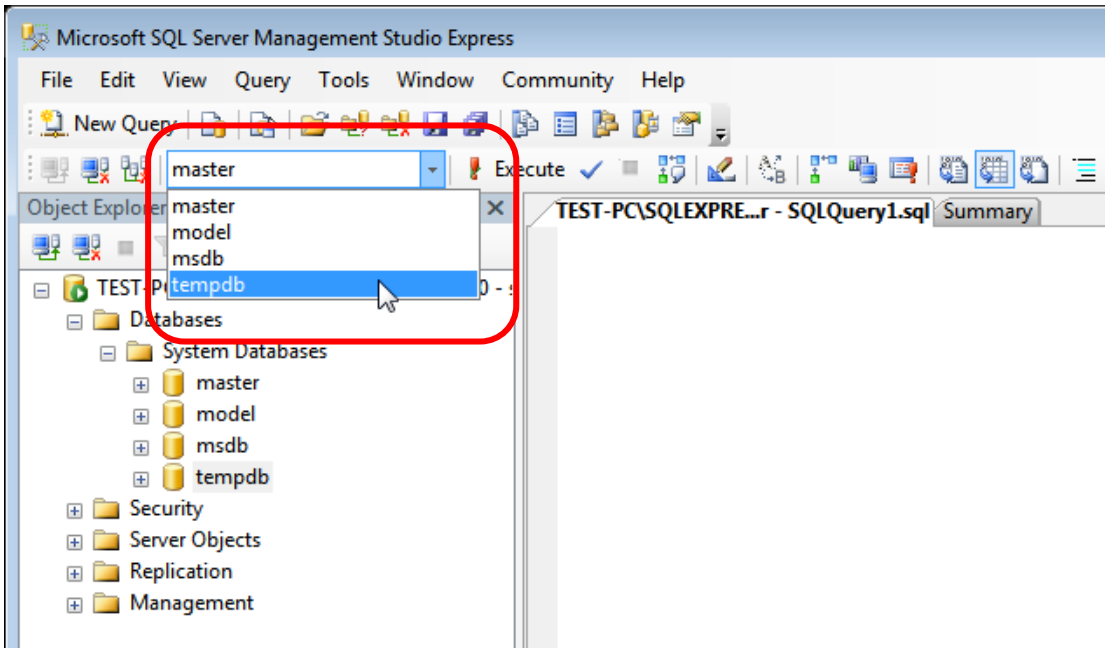


STEP 6.2: Click “Database Engine Query” on “SQL Server Management Studio Express”  
And then you have to login again.



|                |   |         |       |      |          |          |       |
|----------------|---|---------|-------|------|----------|----------|-------|
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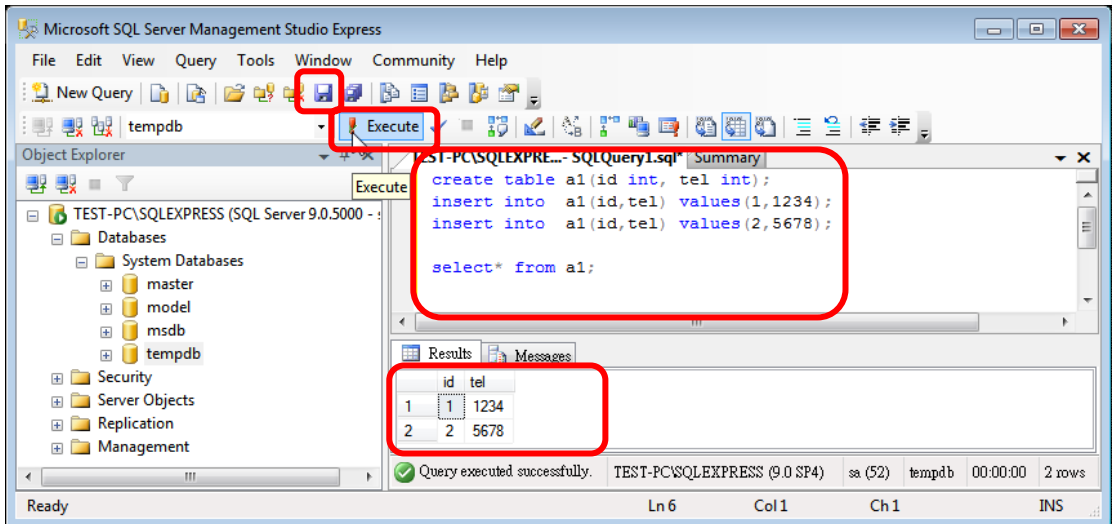
STEP 6.3: Select a database to build table. The example select “tempdb” database.



STEP 6.3: Write the following codes and press “Execute” button. Then, save it.

```
create table a1(id int, tel int);
insert into a1(id,tel) values(1,1234);
insert into a1(id,tel) values(2,5678);

select* from a1;
```



|                |   |         |       |      |          |          |       |
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## [Close firewall on your PC]

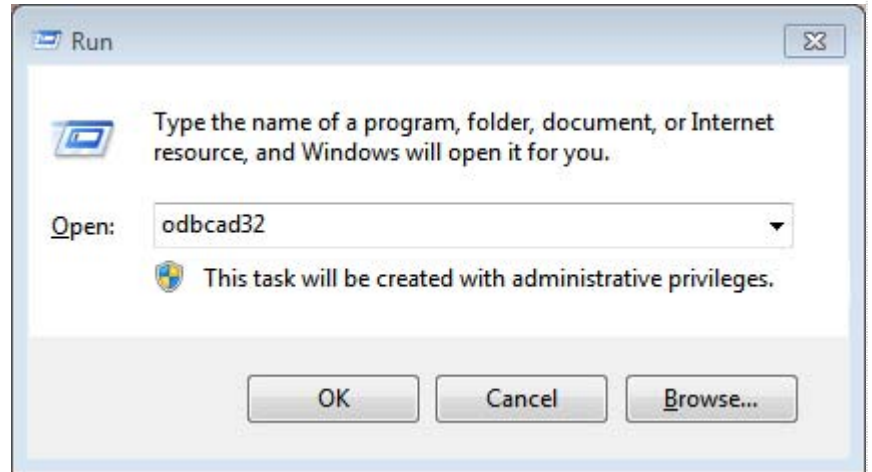
You have to close SQL server's firewall at control panel.

If you don't close the firewall, the other device will connect fail when them client this SQL server.

## [Enable SQL Server by ODBC]

STEP 7.1:

Start → Run → enter "odbcad32"



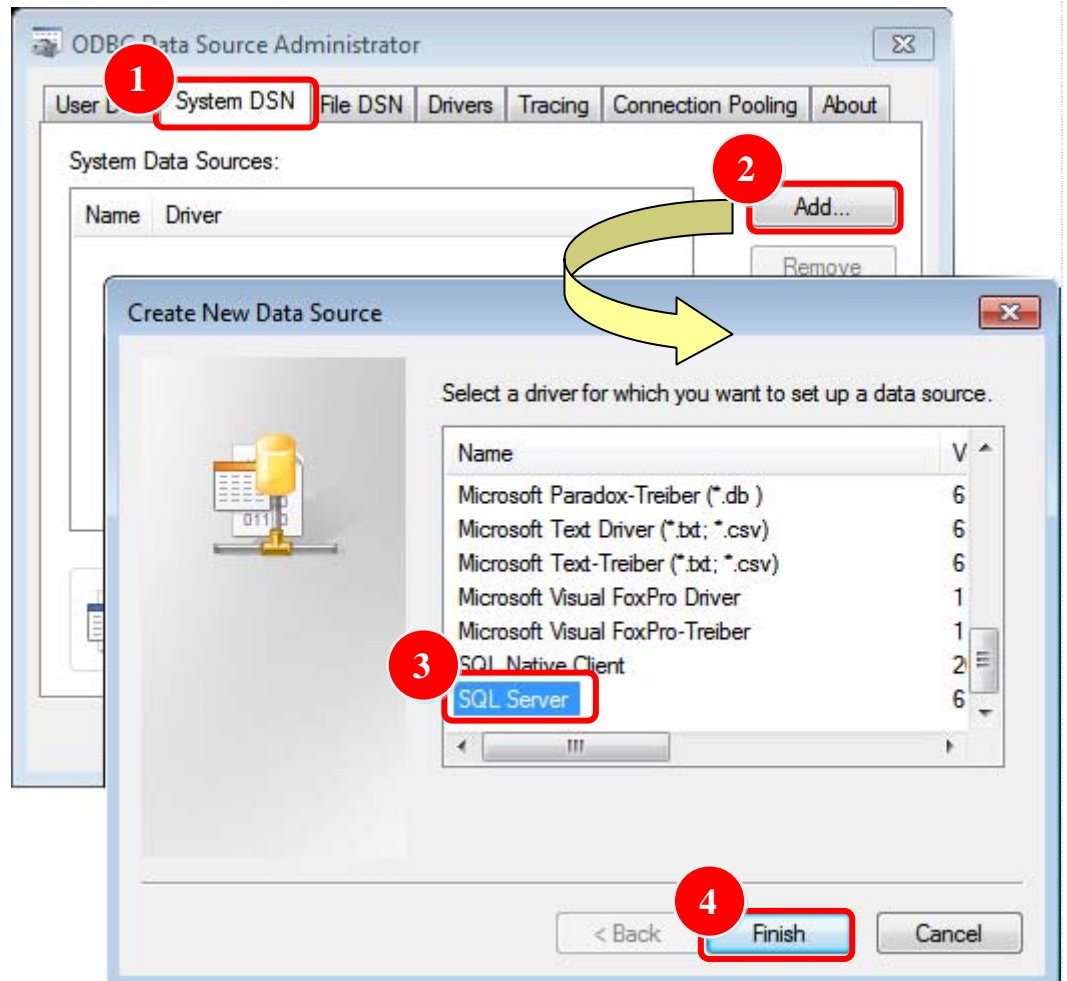
STEP 7.2: Add System DSN

Part 1: Select tab "System DSN"

Part 2: Click button "Add..."

Part 3: Select list "SQL Server"

Part 4: Click button "Finish"



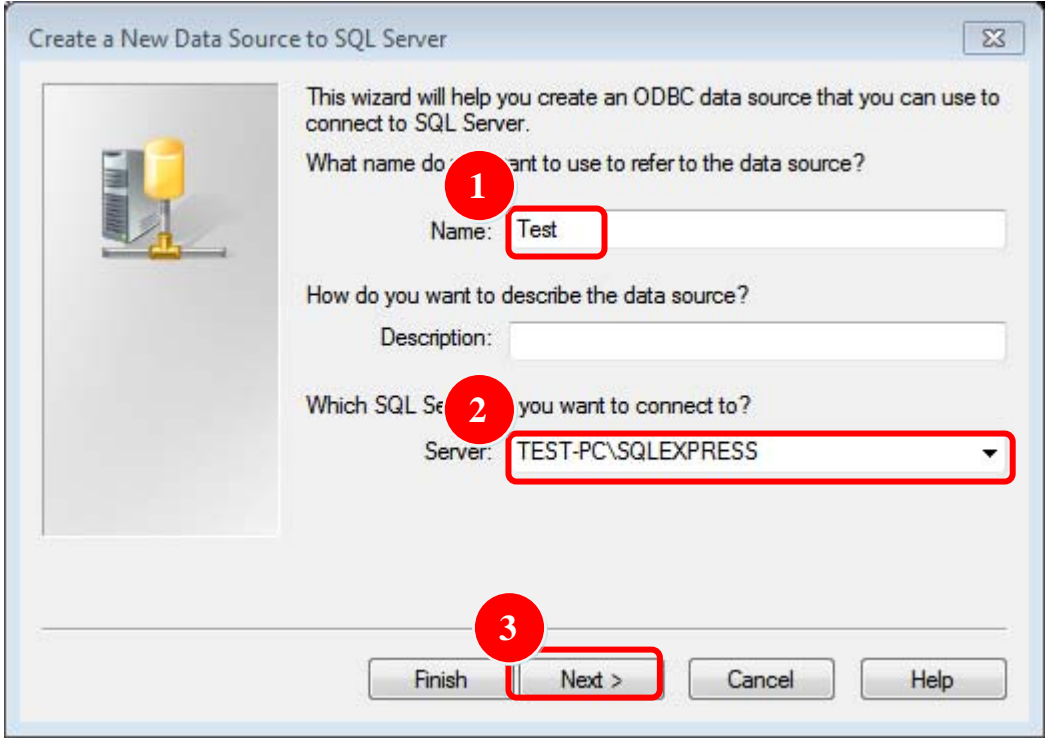
|                |   |         |       |      |          |          |       |
|----------------|---|---------|-------|------|----------|----------|-------|
| Classification | System and Application FAQ on WinCE PAC |         |       |      | No.      | 5-004-00 |       |
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There are two places need to be adjusted.

**STEP 7.3: Create a New Data Source to SQL Server**

Part 1: Modify the name by yourself

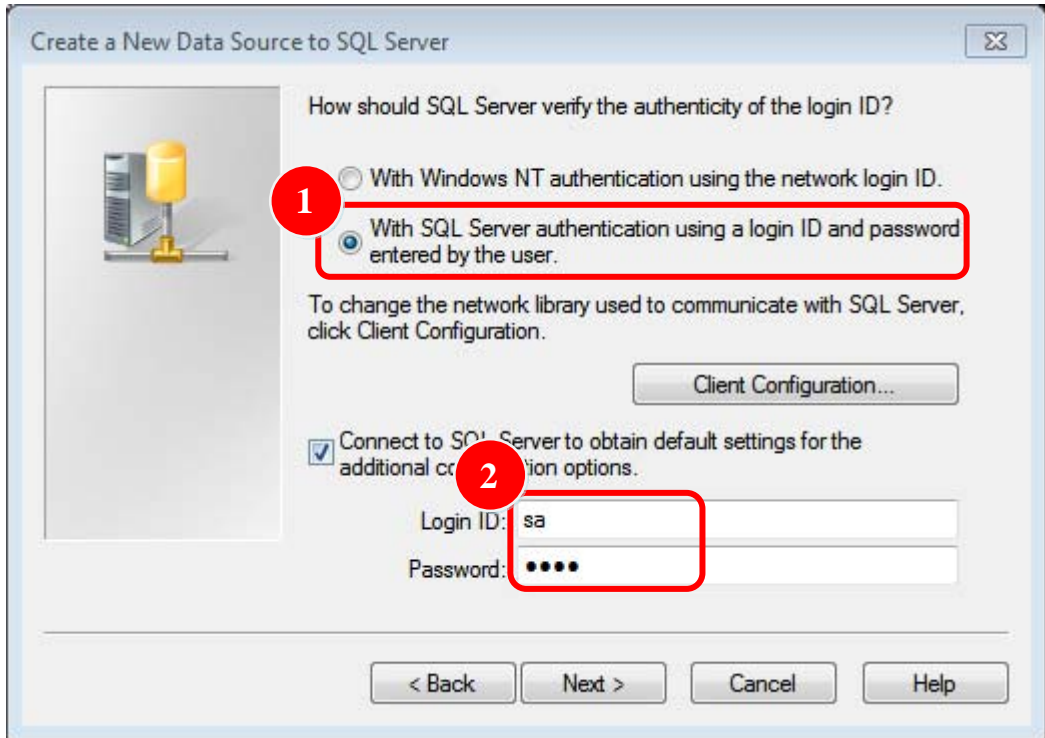
Part 2: Click ComboBox to select the data on this PC



**STEP 7.3: Select login mode**

Part 1: Choose second radiobox

Part 2: The login code must be "sa". Input a password that is set in Step1.



|                |   |         |       |      |          |          |       |
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## [Modify the SqlSrRemote demo to connect remote SQL server]

[C#]

**Modify IP, database name, ID, password**

```
string strConn = " server=10.1.0.56\\sqlexpress;database=tempdb;user id=sa;password=1234;"
```

**Connect target SQL**

```
SqlConnection connRemote = new SqlConnection(strConn);
connRemote.Open();
```

**Select\* from a1**

```
strSql = "select* from a1";
sqlCmd.Connection = connRemote;
sqlCmd.CommandText = strSql;
sqlReader = sqlCmd.ExecuteReader();
```

**Create table and display the from**

```
dTable = new DataTable("a1");
dTable.Columns.Add("id", typeof(int));
dTable.Columns.Add("tel", typeof(int));
```

```
while (sqlReader.Read())
{
    dRow = dTable.NewRow();
    dRow["id"] = sqlReader["id"];
    dRow["tel"] = sqlReader["tel"];
    dTable.Rows.Add(dRow);

    dbCount += 1;
}
```

```
dataGrid1.DataSource = dTable;
label5.Text = "Number: " + dbCount;
sqlCmd.Dispose();
sqlReader.Close();
```

**Standard command program**

```
string strSql = null;
SqlCommand sqlCmd = new SqlCommand();
SqlDataReader sqlReader = default(SqlDataReader);
strSql = "You want execute SQL command";
sqlCmd.Connection = connRemote;
sqlCmd.CommandText = strSql;
sqlReader = sqlCmd.ExecuteReader();
sqlCmd.Dispose();
sqlReader.Close();
```

|                |   |         |       |      |          |          |       |
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[VB.net]

### Modify IP, database name, ID, password

```
Dim strConn As String = " server=10.1.0.56\sqlexpress;database=tempdb;user
id=sa;password=1234;"
```

### Connect target SQL

```
Dim connRemote As New SqlConnection (strConn)
connRemote.Open()
```

### Select\* from a1

```
strSql = "select* from a1"
sqlCmd.Connection = connRemote
sqlCmd.CommandText = strSql
sqlReader = sqlCmd.ExecuteReader()
```

### Create table and display the from

```
dTable = New DataTable ("a1")
dTable.Columns.Add("id", GetType(Integer))
dTable.Columns.Add("tel", GetType(Integer))
```

```
While sqlReader.Read()dRow = dTable.NewRow();
    dbCount += 1;
    dRow = dTable.NewRow()
    dRow("id") = sqlReader("id")
    dRow("tel") = sqlReader("tel")
    dTable.Rows.Add(dRow)
    dbCount += 1
```

End While

```
dataGrid1.DataSource = dTable
label5.Text = "Number: " + dbCount
sqlCmd.Dispose()
sqlReader.Close()
```

### Standard command program

```
Dim strSql As String = Nothing
Dim sqlCmd As New SqlCommand()
Dim sqlReader As SqlDataReader = Nothing
strSql = "You want execute SQL command"
sqlCmd.Connection = connRemote
sqlCmd.CommandText = strSql
sqlReader = sqlCmd.ExecuteReader()
sqlCmd.Dispose()
sqlReader.Close()
```



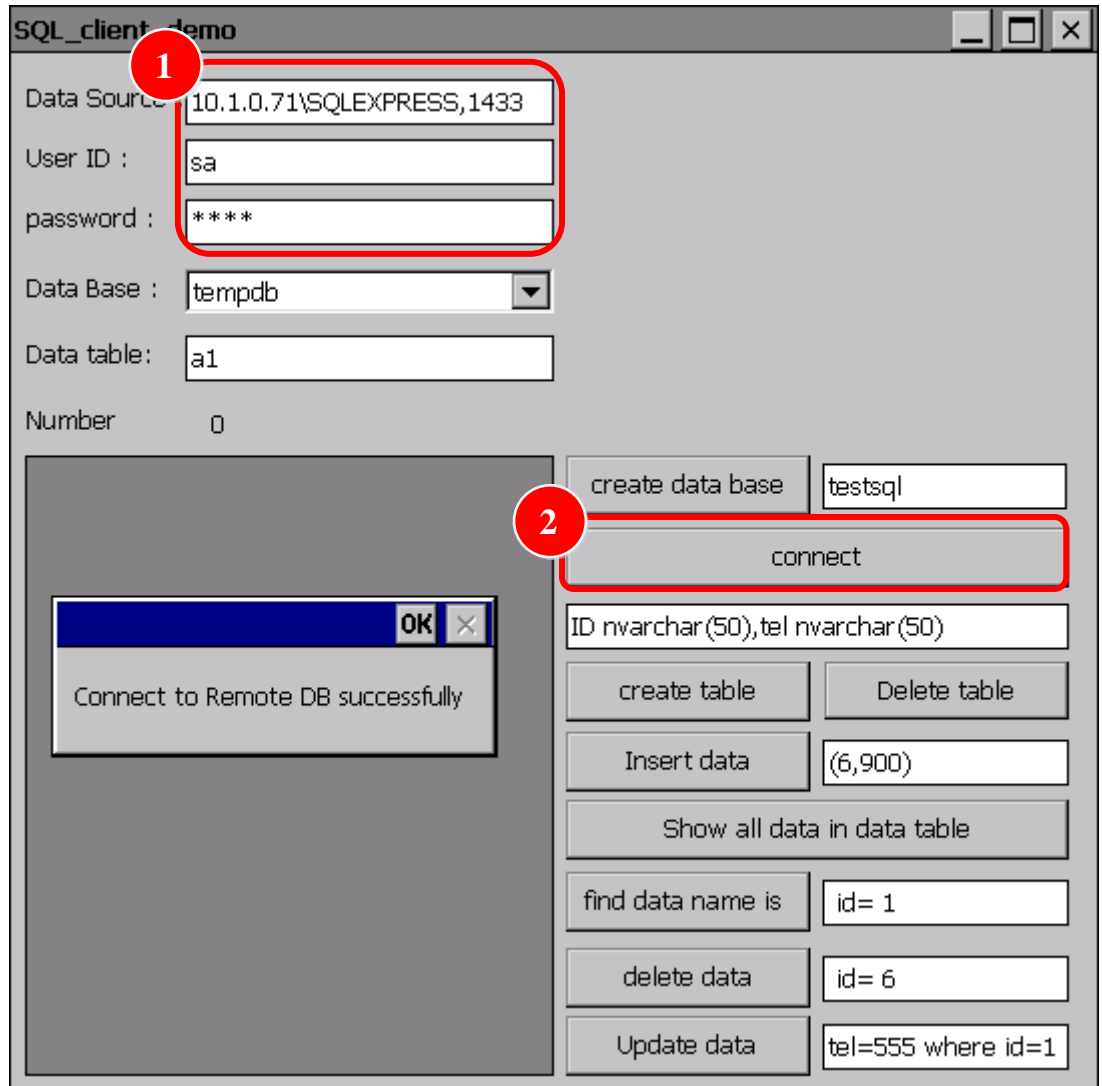
|                |   |         |       |      |            |          |       |
|----------------|---|---------|-------|------|------------|----------|-------|
| Classification | System and Application FAQ on WinCE PAC |         |       |      | No.        | 5-003-00 |       |
| Author         | Tunglu-Yu                               | Version | 1.0.1 | Date | 2013/05/06 | Page     | 23/24 |

## [Demo Program]

STEP 1: Enter the target server, user id, password

Part 1: Enter the target server(If PC has firewall, enter the port number ,1433), database user id, password

Part 2: Click button “connect”, it will show the message box if it connect success



STEP 2: Select ComboBox “Data Base” for CREATE, SELECT, INSERT, DELETE, etc.

**Button information for this example, and the red string user can be change.**

Create data base: "CREATE DATABASE **testsql**"

Create table: "CREATE TABLE **a1**(ID nvarchar(50),tel nvarchar(50))"

Delete table: "DROP TABLE **a1**"

Insert data: "Insert Into **a1** Values (**6,900**)"

Show all data in data table: "Select \* from **a1**"

Find data name is: " Select \* from **a1** where **id= 1**"

Delete data: "delete from **a1** where **id= 6**"

Update data: "Update **a1** set **tel=555** where **id=1**"

|                |   |         |       |      |            |          |       |
|----------------|---|---------|-------|------|------------|----------|-------|
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| Author         | Tunglu-Yu                               | Version | 1.0.1 | Date | 2013/05/06 | Page     | 24/24 |

## Revision History

| Revision | Date       | Description   |
|----------|------------|---|
| 1.0.1    | 2013/05/06 | NEW: Added support information for WP-5000 and VP-4131. |
| 1.0.0    | 2010/04/22 | Initial release   |