

Appendix-4

Manual for Computing Frequency Scores

1. Outline of computing procedure
2. Preparation of input data from PIS data
3. Preliminary calculation
4. Category correction and re-calculation
5. Correcting category score
6. How to improve prediction accuracy

1. Outline of the computing procedure

The computing procedure of the factor scores indicated by “Sheet 2” is explained in this appendix. The multiple regression analysis with dummy parameters is used for the calculation of the factor scores. SPSS (Statistical Package for Social Science) was used as the statistical analysis software. A computing procedure is explained using calculations by SPSS. If another statistical analysis software is used, the technique is changed accordingly. In addition, the Soil Collapse (SC) type is chosen as an example of the calculation. When other disaster types are concerned, calculation must be undertaken by transposing the items and categories to those of that disaster type.

The outline of the computing procedure is indicated below.

- 1) Preparation of input data from PIS data
- 2) Preliminary calculation
- 3) Category correction and re-calculation

When a category score is not calculated properly, or the prediction accuracy is too low, refer to the following section. “4) How to improve the prediction accuracy”.

2. Preparation of input data from PIS data

The example of input data layout is shown in Table A4.1. The results of a survey for every site are entered in each line, and the abbreviation character of a column is indicated by “Sheet 2”.

For example, “Na” is “Number of RCDs (nos.)”, and “a” is “Length of survey site”. “k_a” is “Erosion” and “k_b” is “Piping hole” in the item of “Erosion on the slope”.

The integers entered in the cells from “a” to “j” show the ranged/classified factor category for each factor item, which corresponds to the results of the PIS. The integer number is given in an order from the leftmost factor category ($L \geq 300\text{m}$ is “1”, $300\text{m} > L \geq 200\text{m}$ “2”, $200\text{m} > L \geq 100\text{m}$ “3”, and $100\text{m} > L$ “4”).

In the cells from “k_a” to “l_d”, 1 or 0 is entered, depending upon whether the “Erosion on the slope” or the “Deformation/Collapse” corresponds to the defined factor category or not, respectively. For example, on a certain slope, if “Erosion on the Slope” resulted not from “Piping hole” but from “Erosion”, 1 is entered in “k_a”, and 0 in “k_b”.

“FRCDs” in the rightmost column are interpreted as potential FRCDs without countermeasure effects. That is to say, they should be argued in conjunction with both FRCDa on the slope without countermeasure and FRCDbc on the slope with countermeasure. Analysis is done by making FRCDs the objective variables.

Table A4.1 An Example of Input Data

RoadName	StationKm	StationM	Side	Na	Ya	FRCDA	Nbc	Ybc	FRCDBC	Yd	a	b	c	d	e	f	g	h	i	j	ka	kb	la	lb	lc	ld	FRCDD
Lagawa-Banawe Road	305	190	Left side of road	3	10	0	0			1	4	4	1	1	2	2	1	3	2	2	0	0	1	0	0	0	0
Lagawa-Banawe Road	305	450	Left side of road	10	10	0.7	0			1	3	4	1	1	2	2	1	3	3	2	0	0	1	0	0	0	0.7
Lagawa-Banawe Road	305	654	Left side of road	3	10	0	0			1	4	4	1	1	2	1	1	1	2	2	0	0	1	0	0	0	0
Lagawa-Banawe Road	307	801	Left side of road	3	10	0.3	0			2	4	1	1	4	2	3	3	2	2	0	0	1	0	0	0	0	0.3
Lagawa-Banawe Road	308	158	Left side of road	3	10	0	0			3	4	1	1	4	2	3	3	2	2	0	0	1	0	0	0	0	0
Lagawa-Banawe Road	308	440	Left side of road	0	10	0.6	0			2	4	1	1	2	1	1	2	2	2	0	0	1	0	0	0	0	0.6
Lagawa-Banawe Road	308	960	Left side of road	2	10	0	0			4	4	1	2	2	2	2	3	2	2	0	0	0	0	0	0	0	0
Lagawa-Banawe Road	309	284	Left side of road	3	10	0.1	0			3	4	1	1	3	2	1	3	2	2	0	0	0	0	0	0	0	0.1
Lagawa-Banawe Road	309	550	Left side of road	2	10	0	0			2	4	1	2	2	2	2	3	2	2	0	0	0	0	0	0	0	0
Lagawa-Banawe Road	310	182	Left side of road	1	10	0.2	0			4	4	1	2	2	2	2	2	2	2	0	0	1	0	0	0	0	0.2
Lagawa-Banawe Road	310	519	Left side of road	1	10	0.1	0			4	4	1	1	3	1	1	2	2	2	0	0	0	0	0	0	0	0.1
Lagawa-Banawe Road	313	41	Left side of road	0	10	0.2	0			3	3	1	1	2	2	2	3	2	2	0	0	0	0	0	0	0	0.2
Nueva Vizcaya-Ifugao-Mt F	315	20	Right side of road	3	10	1.2	0	10		1	1	4	3	1	4	3	3	3	4	1	1	0	1	0	1	0	1.2
Nueva Vizcaya-Ifugao-Mt F	316	50	Left side of road	0	10	0.1	0	10		0	1	4	3	3	2	2	1	2	3	2	0	0	0	0	0	0	0.1
Nueva Vizcaya-Ifugao-Mt F	305	40	Left side of road	2	10	0.1	0			1	4	4	1	2	1	2	1	3	3	2	0	0	1	0	0	0	0.1
Nueva Vizcaya-Ifugao-Mt F	305	140	Left side of road	1	10	0.1	0	10		1	4	4	1	2	2	2	1	3	3	2	0	0	1	0	0	0	0.1
Nueva Vizcaya-Ifugao-Mt F	318	50	Right side of road	0	10	0.1	0	10		0	3	4	3	1	4	3	1	4	5	2	0	0	0	0	0	0	0.1
Nueva Vizcaya-Ifugao-Mt F	318	670	Right side of road	0	10	0	0	10		0	4	4	1	3	2	1	3	2	2	0	0	0	0	0	0	0	0
Nueva Vizcaya-Ifugao-Mt F	318	760	Right side of road	0	10	0	0	10		4	4	4	2	2	3	1	3	5	2	0	0	1	0	0	0	0	0
Nueva Vizcaya-Ifugao-Mt F	318	850	Right side of road	0	10	0	2	10	0.1	1	3	4	3	2	4	3	1	3	5	2	0	0	1	0	0	0	0.1
Nueva Vizcaya-Ifugao-Mt F	319	35	Right side of road	2	10	0	0	10		1	3	3	3	2	2	3	1	3	5	2	1	0	1	0	0	0	0
Nueva Vizcaya-Ifugao-Mt F	319	850	Right side of road	1	10	0	0	10		1	4	4	3	2	2	1	3	2	2	0	0	1	0	0	0	0	0
Nueva Vizcaya-Ifugao-Mt F	324	480	Left side of road	0	10	0	0	10		1	1	4	3	2	3	3	1	4	5	2	0	0	0	0	0	0	0
Nueva Vizcaya-Ifugao-Mt F	326	110	Left side of road	3	10	0	0	10		0	3	3	2	1	4	3	1	3	2	2	0	0	1	0	1	0	0
Nueva Vizcaya-Ifugao-Mt F	326	340	Left side of road	1	10	0.1	0	10		1	3	3	3	1	2	2	1	3	2	2	0	0	1	0	0	0	0.1
Nueva Vizcaya-Ifugao-Mt F	327	100	Left side of road	0	10	0	0	10		0	4	4	3	3	3	2	1	4	5	2	0	0	0	0	0	0	0
Nueva Vizcaya-Ifugao-Mt F	327	160	Right side of road	0	10	0	2	10	0.3	0	3	4	2	1	3	1	2	1	2	2	0	0	1	0	0	0	0.3
Nueva Vizcaya-Ifugao-Mt F	327	380	Right side of road	2	10	0.2	0	10		1	3	2	3	1	4	3	1	4	5	2	1	0	1	0	0	0	0.2
Nueva Vizcaya-Ifugao-Mt F	327	480	Right side of road	2	10	0	0	10		1	4	4	2	1	4	1	1	3	3	2	1	0	1	0	0	0	0
Nueva Vizcaya-Ifugao-Mt F	327	770	Left side of road	0	10	0	1	10	0.1	0	1	3	4	2	4	3	3	4	5	2	0	0	1	0	0	0	0.1
Nueva Vizcaya-Ifugao-Mt F	328	180	Right side of road	2	10	0.2	0	10		1	3	3	3	1	4	3	2	4	5	2	0	0	1	0	0	0	0.2
Nueva Vizcaya-Ifugao-Mt F	328	560	Left side of road	3	10	0.1	0	10		1	3	1	3	1	4	3	1	3	3	2	0	0	1	0	0	0	0.1
Nueva Vizcaya-Ifugao-Mt F	329	240	Left side of road	1	10	0	0	10		1	3	3	3	1	4	2	2	3	2	2	1	0	1	0	0	0	0
Nueva Vizcaya-Ifugao-Mt F	329	260	Right side of road	2	10	0.1	0	10		1	4	3	2	1	4	2	1	1	2	2	1	0	1	0	0	0	0.1
Nueva Vizcaya-Ifugao-Mt F	329	450	Left side of road	1	10	0.4	0	10		1	1	3	3	2	4	3	1	3	2	2	0	0	1	0	0	0	0.4
Nueva Vizcaya-Ifugao-Mt F	330	18	Left side of road	2	10	0.5	0	10		0	4	2	2	1	4	1	1	3	3	2	1	0	1	0	0	0	0.5
Nueva Vizcaya-Ifugao-Mt F	330	150	Left side of road	2	10	0.3	0	10		0	1	2	2	1	4	1	1	3	3	2	1	0	1	0	0	0	0.3
Nueva Vizcaya-Ifugao-Mt F	330	655	Left side of road	1	10	0	0	10		0	2	2	2	3	4	1	1	3	3	2	1	0	1	0	0	0	0
Nueva Vizcaya-Ifugao-Mt F	331	770	Left side of road	2	10	1	0	10		1	4	1	1	2	2	1	1	2	2	1	1	1	1	1	0	1	1
Nueva Vizcaya-Ifugao-Mt F	331	840	Left side of road	4	10	2	0	10		1	1	1	1	2	2	1	1	2	2	1	1	1	1	1	0	1	2
Nueva Vizcaya-Ifugao-Mt F	332	370	Left side of road	2	10	0.2	0	10		0	3	1	1	2	2	1	1	3	3	2	0	0	1	0	0	0	0.2
Nueva Vizcaya-Ifugao-Mt F	332	360	Left side of road	0	10	0.2	0	10		0	2	3	2	1	4	1	1	3	3	2	1	0	0	0	0	0	0.2
Nueva Vizcaya-Ifugao-Mt F	332	700	Left side of road	0	10	0	0	10		0	2	3	2	3	4	1	1	3	3	2	0	0	0	0	0	0	0
Nueva Vizcaya-Ifugao-Mt F	319	925	Right side of road	2	10	0.2	0	10		1	2	4	3	1	2	3	1	3	2	2	0	0	1	0	0	0	0.2
Nueva Vizcaya-Ifugao-Mt F	320	130	Right side of road	1	10	0.2	0	10		1	3	3	3	2	2	3	1	3	2	2	1	0	1	0	0	0	0.2
Nueva Vizcaya-Ifugao-Mt F	320	580	Right side of road	1	10	0.1	0	10		0	1	3	3	2	1	3	1	4	5	2	0	0	0	0	0	0	0.1
Nueva Vizcaya-Ifugao-Mt F	322	50	Right side of road	0	10	0	0	10		1	3	2	3	2	1	3	2	4	5	2	0	0	0	0	0	0	0

3. Preliminary calculation

The multiple regression analysis with dummy parameters by SPSS is carried out based on the data in Table A4.1. The objective variable is FRCD and explanatory variables are those from “a” to “l_d”. In SPSS, the normalized category scores, multiple correlation coefficient, mean of all samples etc. are computed (Table A4.2). The terms which should be verified are the relation between categories and category scores for each item, and the multiple correlation coefficient.

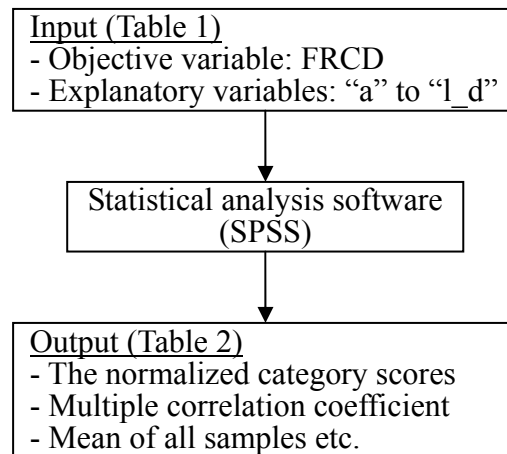


Figure A4.1 Calculation Flow

The multiple regression analysis with dummy parameters calculates the factor scores so as to minimize the residual sum of squares between the observation value (FRCD) and the prediction value (FRCDp). There are some packages of common statistical analysis software such as SPSS, SAS, etc. And this analysis is undertaken using a charged option of SPSS (Statistical Package for Social Science).

The relation between categories and category scores is whether the magnitude relation of category scores and the general degree of category influence to FRCD are rational. For example, in “a” of Table 2, the category scores are 0.133, 0.016, -0.019, and -0.029. This shows that the degree of influence to FRCD becomes smaller as the slope length becomes smaller. Therefore, it shows that the appropriate category is set by the item “a”. In the case of “b”, the category scores are -0.014, 0.008, -0.034 and 0.031. The slope height with the largest degree of influence to FRCD is the category where $H < 30m$, subsequently followed by those with $90m > H \geq 60m$, $H \geq 90m$, and $60m > H \geq 30m$. It does not follow that the degree of influence to FRCD becomes smaller as the slope height becomes smaller. It means that the appropriate categorization is not set up by the item “b”, the Height of mountain side slope. Thus, for some of the items from c to l_d the appropriate categorization has been unsuccessful. The following section explains the processing of the items that resulted in the inappropriate categorization.

The multiple correlation coefficient which is another verification term takes the values from 0 to 1, meaning that the prediction accuracy becomes higher as the coefficient approaches 1. When the prediction accuracy is obviously low, refer to "6. How to improve prediction accuracy".

Table A4.2 Result of Preliminary Calculation

Multiple correlation coefficient	0.77								
Mean of all samples	0.187								
Category score etc.	Category Number	Frequency	Mean of FRCDa or FRCDbc	Normalized category score	Category Number	Frequency	Mean of FRCDa or FRCDbc	Normalized category score	
	A				h				
	1	23	0.404	0.133	1	24	0.304	0.053	
	2	22	0.255	0.016	2	38	0.189	-0.002	
	3	68	0.146	-0.019	3	103	0.182	-0.010	
	4	74	0.136	-0.029	4	22	0.077	-0.006	
	B				i				
	1	13	0.454	-0.014	1	17	0.300	0.057	
	2	25	0.180	0.008	2	92	0.187	-0.003	
	3	71	0.156	-0.034	3	22	0.232	0.037	
	4	78	0.172	0.031	4	3	0.500	0.328	
	C				j				
	1	56	0.341	0.073	1	20	0.655	0.302	
	2	72	0.126	-0.027	2	167	0.131	-0.036	
	3	47	0.117	-0.025	k a				
	4	12	0.100	-0.083	0	76	0.116	-0.033	
	D				k b				
	1	47	0.249	0.076	1	111	0.235	0.022	
	2	81	0.173	-0.004	k a				
	3	55	0.149	-0.054	0	185	0.172	-0.009	
	4	4	0.250	-0.084	1	2	1.500	0.793	
	E				l a				
	1	13	0.085	-0.108	0	59	0.144	-0.034	
	2	55	0.247	0.043	1	128	0.206	0.016	
	3	25	0.056	-0.108	l b				
	4	94	0.200	0.018	0	177	0.163	-0.013	
	F				l c				
	1	19	0.347	0.019	1	10	0.600	0.233	
	2	92	0.161	-0.030	l d				
	3	76	0.178	0.031	0	178	0.160	-0.001	
	G				l d				
	1	167	0.190	0.007	1	9	0.711	0.027	
	2	9	0.100	-0.019	0	179	0.174	-0.003	
	3	11	0.200	-0.092	1	8	0.475	0.077	

4. Category Correction and Re-calculation

In the foregoing section, it was made clear that items possibly produce some inappropriate categorization. For these items, it is necessary to correct categorization so that the order of the magnitude of the category scores, i.e. the general degree of influence of the item to FRCD, becomes logical and rational. If it is not necessary to correct categorization, you should move on to the following section "5. Correcting category scores".

In the case of "b", the category scores are -0.014, 0.008, -0.034 and 0.031. Obviously the relation between the magnitudes of the category scores and the degree of influence of the slope height to FRCD is irrational. The reasons for this are that the number of samples of a category "1" is not enough, or there are many samples of large FRCD on a small slope (category "4"). In such a case, the category setup is corrected by unifying categories "1" and "2", and "3" and "4". If similar needs arise for the other items "c" through "l_d", the category setup should be similarly corrected (Table A4.3).

After the category correction, the multiple regression analysis with dummy parameters by SPSS is re-calculated. After re-calculating, it is checked whether the order of the magnitudes of category scores and the general degree of category influence to FRCD are rational. Category correction and re-calculation are repeated until the degree of category influence becomes reasonable. Table A4.4 shows the finalized category scores after category correction.

If some items are not improved even after the category correction, refer to "6. How to improve prediction accuracy ". If improvement is not achieved at all, delete the item.

Table A4.3 Category Number

Category Number	Reset Category Number	Category Number	Reset Category Number
a		h	
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	
b		i	
1	1	1	1
2		2	2
3	2	3	
4		4	
c		5	3
1	1	j	
2	2	1	1
3		2	2
4	3	k_a	
d		0	0
1	1	1	1
2	2	k_b	
3	3	0	0
4		1	1
e		l_a	
1	1	0	0
2		1	1
3	2	l_b	
4		0	0
f		1	1
1	1	l_c	
2	2	0	0
3		1	1
g		l_d	
1	1	0	0
2	2	1	1
3			

Table A4.4 Result of Re-calculation

Multiple correlation coefficient	0.75							
Mean of all samples	0.187							
Category score etc.	Category Number	Frequency	Mean of FRCDa or FRCDbc	Normalized category score	Category Number	Frequency	Mean of FRCDa or FRCDbc	Normalized category score
	a				h			
	1	23	0.404	0.149	1	24	0.304	0.034
	2	22	0.255	0.030	2	38	0.189	0.006
	3	68	0.146	-0.016	3	125	0.163	-0.008
	4	74	0.136	-0.040	4			
	B				i			
	1	38	0.274	0.008	1	17	0.300	0.047
	2							
	3	149	0.164	-0.002	3	117	0.203	0.003
	4							
	c				5			
	1	56	0.341	0.080	5	53	0.113	-0.021
	2	119	0.123	-0.031	j			
	3							
	4				12	0.100	-0.065	1
	d				2			
	1	47	0.249	0.077	2	167	0.131	-0.034
	2	81	0.173	-0.005	k a			
	3	59	0.156	-0.055	0	76	0.116	-0.044
	4							
	e				1			
	1	68	0.216	0.017	1	111	0.235	0.030
	2							
	3	119	0.170	-0.010	k b			
	4							
	f				0			
	1	19	0.347	0.039	0	185	0.172	-0.007
	2	168	0.168	-0.005	1	2	1.500	0.674
	3							
	g				l a			
	1	167	0.190	0.002	0	59	0.144	-0.037
	2	20	0.155	-0.017	1	128	0.206	0.017
	3							
	h				l b			
					0			
					1			
					l c			
					0			
					1			
					l d			
					0			
					1			

5. Correcting category scores

After calculating category scores, they are changed into the corrected scores. A formula is shown below. The computed category scores are shown in Table A4.5.

$$CS = NCS + \text{Mean} / NI$$

Where CS : Corrected category score,
NCS : Normalized category score,
Mean : Mean of all samples (=0.187), and
NI : Number of items (=16).

Table A4.5 Normalized Category Score and Original Category Score

Category Number	Normalized category score	Corrected category score	Category Number	Normalized category score	Corrected category score
a			h		
1	0.149	0.160	1	0.034	0.046
2	0.030	0.041	2	0.006	0.017
3	-0.016	-0.005	3		
4	-0.040	-0.028	4	-0.008	0.003
b			i		
1	0.008	0.019	1	0.047	0.058
2			2		
3	-0.002	0.010	3	0.003	0.014
4			4		
c			5	-0.021	-0.010
1	0.080	0.092	j		
2	-0.031	-0.019	1	0.285	0.297
3			2	-0.034	-0.023
4			-0.065	-0.054	k a
d			1	-0.044	0.000
1	0.077	0.089	2	0.030	0.072
2	-0.005	0.007	k b		
3			1	-0.007	0.000
4	-0.055	-0.043	2	0.674	0.645
e			l a		
1	0.017	0.028	1	-0.037	0.000
2			2	0.017	0.051
3	-0.010	0.002	l b		
4			1	-0.013	0.000
f			2	0.227	0.229
1	0.039	0.051	l c		
2	-0.005	0.007	1	-0.006	0.000
3			2	0.119	0.120
g			l d		
1	0.002	0.014	1	-0.003	0.000
2	-0.017	-0.005	2	0.063	0.062
3					

6. How to improve prediction accuracy

This section discusses some methods for improving the prediction accuracy and the reliability of analysis resulting from the multiple regression analysis with dummy parameters.

1) Check of multicollinearity

When a high correlation exists between some explanatory variables, it is needed to drop one of the variables in order to improve prediction accuracy. The Cramer's coefficient of association is used when calculating the correlation of the qualitative explanatory variables. SPSS can calculate this.

When a correlation between explanatory variables is high (0.7 or more), explanatory variables with a lower partial correlation coefficient should be deleted. Partial correlation coefficients are computed by the multiple regression analysis with dummy parameters of SPSS.

2) Check of the order of category average and category scores

When the averages of objective variables, i.e. FRCs in this case, for each category are arranged in a descending order, some part of the order of category scores may not be compatible. By unifying or deleting some categories, the reliability of analysis result improves.

3) Check of the order of range and multiple correlation coefficient

When the ranges and the partial correlation coefficients calculated for each item are arranged in an ascending order, these orders may not be compatible. In this case, re-calculation should be undertaken after unifying or eliminating some categories with few samples. The reliability of analysis result improves by adjusting these item orders.

By the way, the range is the difference between the minimum category score and the maximum category score of an item. It can be said that the influence of an item is so large that the range of the item becomes large. The ranges and the partial correlation coefficients are computed by the multiple regression analysis with dummy parameters of SPSS.

4) Check of observed value and predicted value

The sample with extremely large difference between the observed value and the predicted value should be deleted from the analysis.

Appendix-5

Road Slope Management System (RSMS)

Manual Volume 1

Application Operation Manual

Ver 1.2 June 2007

The Department of Public Works and Highways

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RSMS

RSMS (Road Slope Management System) is an application software program, which was developed in the Study named “The Study on Risk Management for Sediment-related Disaster on Selected National Highways in The Republic of The Philippines. This Study was undertaken by the Japan International Cooperation Agency (JICA) Study Team, The Department of Public Works and Highways (DPWH) Counterpart Team, in cooperation with the DPWH and the JICA Philippine Office.

SECTION 1 INTRODUCTION

This section provides the users with an overview of the Road Slope Management System (RSMS).

RSMS is designed to automate the file maintenance of inventory surveys and inventory sheet reports. The objectives of the system are as follows:

√ **Improved service distribution**

The system provides information through electronic access to the data in the network to those deemed in need of such information.

√ **Improved security and integrity of all vital documents**

The system ensures the security and integrity of all documents by limiting access of the system to authorized users.

√ **Improved management**

When all the data are properly entered into the database of RSMS, all information can be easily retrieved at any given client computer within the network. Reports can be easily created.

√ **Improved report generation**

Related reports like the Excel sheet are easily generated by the system.

The purpose of this manual is to assist the authorized users of the Road Slope Management System in optimizing their efficiency through proper usage of the system.

The manual presents to reader the steps he/she has to undertake in the performance of his/her duties while utilizing the Road Slope Management System. The manual is arranged by modules for easier and faster reference.

1.1 User Category

The users of RSMS are classified into the following four categories. All of the application functions are contained in this manual. However, not all users can access all the functions. The menu items that cannot be accessed by a user are colored grey and are disabled (cannot to be used).

Read-Only End Users

These users can only browse the data stored in the database. They can export the retrieved data or an integrated list into Excel files. They can change their own passwords by themselves in order to keep the security level high.

Data Encoders

These users are regarded as the operators for data input into the database. In addition to the operations allowed to Read-only End Users described above, Data Encoders can input data manually from the keyboard or from Excel files. They can modify the data which is already stored in the database.

Application User Coordinators

These users undertake the administrative jobs in data handling and user management. In addition to the operations allowed to Data Encoders described above, Application User Coordinators can remove (hide) the data. Hidden data cannot be browsed, as if they were deleted. But the data still exists in the RSMS application system. Application User Coordinators can also un-remove(un-hide) the removed data.

They can reset another user's password in case the user forgets his/her password. Furthermore, Application User Coordinators can register a new RSMS user or delete a user.

Application Support Administrators

These users support the application system, and can perform all the operations of the system. In addition to the operations allowed to Application User Coordinators described above, Application Support Administrators can delete data. They can grant or revoke the privilege of other users, which means that they can change the category (Read-only End Users, etc) of other users. They can backup and restore the database. The shutdown and restart of the database management system are usually performed at the time of the database backup. Finally, they can change the formula used in the Indicative Feasibility Assessment (IFA) calculation.

1.2 Road Slope Management System Application Modules

The following modules define the RSMS's functions.

Data Manipulation Module

This module allows authorized users to manipulate data. The module includes add, modify, remove/un-remove, delete and import of records. The available functions for a user are determined by the user's category.

Application Support Administrator : Add, Import, Modify, Remove/Un-Remove, Delete

Application User Coordinators	Add, Import, Modify, Remove/Un-Remove, Delete
Data Encoders	Add, Import, Modify, Remove/Un-Remove
Read-Only End Users.....	<i>Nothing</i>

Data Browser Module

This module allows all users to view the data and export to Excel files.

Administrative Operation Module

This module allows authorized users to change and reset password. The authorized users can also register and delete users; grant privileges to users, or revoke privileges; start and shutdown the database management system, and backup the database. The available functions for a user are determined by the user’s category.

Application Support Administrator	Reset other user’s password. Add/Delete users Grant/Revoke privilege Shutdown/Start/Backup/Restore database Change formula
Application User Coordinators	Change own password Reset other user’s password. Add/Delete users
Data Encoders	Change own password
Read-Only End Users.....	Change own password

1.3 Definition of Terms

A brief list of terms and their explanations are provided here.

FRCDP	Potential Frequency of Road Closure Disaster
FRCDA	Actual Frequency of Road Closure Disaster
IFA	Indicative Feasibility Assessment
RCD	Road Closure Disaster
Database Management System	RSMS adopts a commercial application software called the Relational Database Management System (RDBMS) in order to store the inventory survey information. The database table, which is the main component of RDBMS, is similar to an Excel sheet, but with more sophisticated functions.

Worksheet	A single spreadsheet that contains rows and columns of data. A worksheet is treated like a database table.
Record	In computer science, composition is a way to combine simple objects or data types into more complex ones. Composed objects are called fields, items, members, and attributes. The resultant composition is called a structure or record. The term usually varies across languages. Members are often named so that each member is distinguished from the others.
Remove/un-remove (Hide/Un-hide data)	‘Remove (Hide)’ means that the data is hidden from the user, but is not deleted from the database. Instead, the data is marked with a Remove Flag. The record then would not be a part of the data retrieval scope. Removed data can be un-removed (un-hide). For general users, removed records are the same as deleted records (see below). However, the removed records can be recovered.
Delete	‘Delete’ means the deletion of a record marked with a Remove Flag. Deleted records cannot be recovered.
Add /Import data	“Add data” or “Add record” means that the user inputs new data into the RSMS database manually via specific forms viewed on a personal computer (PC) monitor. The user inputs information such as the name of the inventory survey’s inspector using the keyboard, or selects items such as the type of the disaster from a menu displayed on the computer monitor. On the other hand, “Import data” or “Import record” means the user inputs a new data via an Excel file. The user only needs to specify the Excel filename.
Username/Password	To use RSMS, a ‘Username’ and a ‘Password’ are assigned to a user. They are specific to RSMS, and therefore, are different from those of Microsoft Windows. A password can contain up to eight (8) characters and is case sensitive.

**End User(General
User)/Administrator**

General users are divided into two categories in RSMS. Read-Only End Users can only browse the stored data. Data Encoders can create and modify the data. On the other hand, the administrator can manipulate the data, and add/delete users, and he/she takes care of the application system.

**Log in
/ Log on**

Here, 'Login' or 'Logon' means starting the RSMS application software by inputting the username and password. These words are also used to start to operate the computer system (ex. UNIX).

**Start(up)
/ shutdown
database
management
system**

Or, simply referred
to "Start(up)/shutdown
database"

This is not the startup/shutdown of the server PC on which RSMS is installed. This means the startup/shutdown of the database management system. Without starting the database management system, the user cannot use RSMS. After the power of the server PC is switched on, and the OS started up, the database management system automatically starts up.

Before shutting down the PC, all users should exit from the RSMS. It is not necessary to shut down the database management system explicitly.

However, to backup/restore the database, the database management system should be shut down. In this case, the manual shutdown via the RSMS menu is necessary. After the backup/restore is completed, the database management system should be started up again so that the users can use RSMS. This startup is also performed via the RSMS menu.

SECTION 2

GETTING STARTED (all users)

This section provides the user with basic information needed to familiarize him/her with the system. This also shows the user how to start and quit the RSMS.

Command Button



A Command button is used to perform an operation. Some examples are OK, Cancel and Help buttons.

Combo Box



A Combo Box displays a list of choices. If there are more choices than can fit in the box, scroll bars are provided so you can move through the list.

Text Box



A Textbox is a data entry box used to acquire input from the user. When the textbox is disabled (data cannot be typed in it). It has to be activated before it can operate. Generally, 'Activation' is performed by clicking inside the Textbox.

2.1 Window (Dialog box)

A **window** is the user's interface to the application or system. This is used for retrieving information from the user's mouse or keyboard commands. A **dialog box** is used with the same meanings as a window.

Application Window

An Application Window contains a running application as shown in the example below.

RSMS - Road Slope Management System

RSMS - Data Manipulation (Add a new data)

1 General 2 FRCDp 3 Sketches 4 Countermeasures 5 IFA 6 Disaster Countermeasure Management

Survey Point ID :

Region :

Responsible DEO :

Road Name :

Road Section ID :

Station : From : km m Until : km m

Length of survey :

Side of Survey :

Disaster Type :

Name of Inspector :

Date of Survey :

Checked By :

Checked Date :

Save Clear this page Upper Menu Print Help

Message Box

A Message Box is used to display information, warnings indicating why a requested task cannot be accomplished, or messages. Icons represent the nature of the message as in the example shown below.

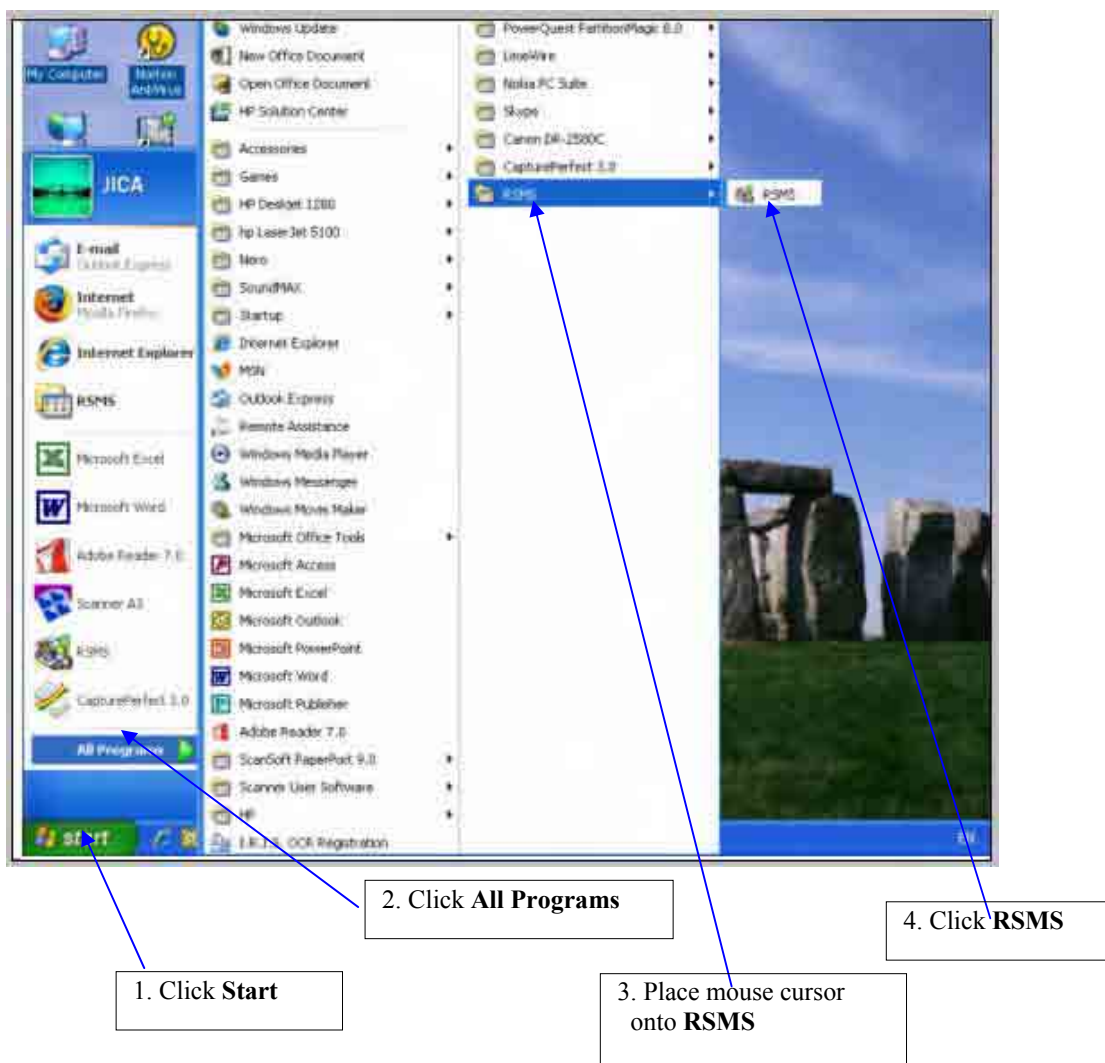


2.2 Starting and Quitting the Road Slope Management System (RSMS)

The system will only be accessible by giving the correct username and password in the Login window shown in the figure below. The user's username and password are used to identify authorized system users, thereby ensuring system security.

To log in to RSMS

1. To start the RSMS application system, click the **Start** button of the monitor display of the PC where the RSMS application is installed. The **Start** button is usually located at the left-bottom corner as shown in the following figure. Next, click the **All Programs** button. There is an item **RSMS** in the pop-up menu. Move the mouse cursor onto that **RSMS**. Furthermore, item **RSMS** is displayed. Click this item. The figure shows an example display of a PC where Microsoft Windows XP Home Edition is installed.



2. Type your username and password in the login information window, then press the **Enter** key of the keyboard. Click **Cancel** to cancel logging in, and this window will disappear.



The password is a security measure used to restrict access to RSMS to unauthorized users. **A password can contain up to 8 characters and is case sensitive.**

3. Incorrect Password or Username will prompt this message box.



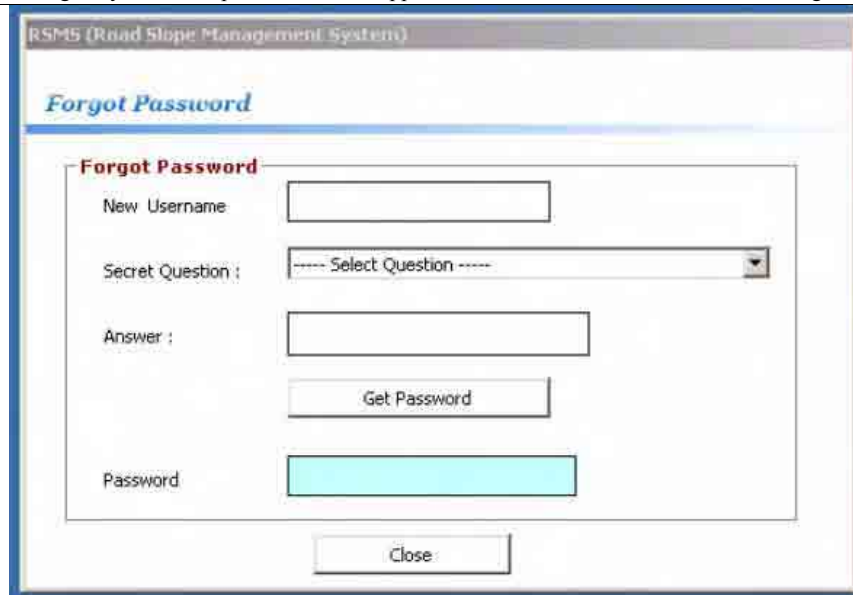
If you forget the correct password, click the **Forgot Password** command button. The window shown below will be displayed.

In this window, you only have to type your username, and then select one question from the menu in the combo box. The question will ask for one of the three:

1. The name of the user's pet
2. The user's favorite color
3. The maiden name of the user's mother

When you were registered as a new user in the RSMS, you were asked to select one question from the above three, and you specified the answer. RSMS stores this information.

Select the correct question, input the correct answer, and then click on the **Get Password** button. Your correct password will be displayed.

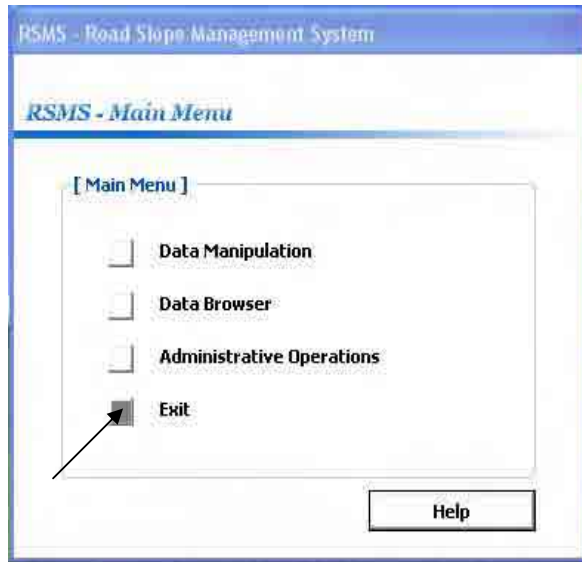


4. After entering the correct information in the Login window, the **Main Menu** will appear containing menus that will be used in the system. Once you log in, your user profile is automatically recognized by the system, assigning you to your role and granting your access rights accorded to that particular role. For a user with an administrator role, all items of the menu can be accessed. For users with other roles, some menu items are colored grey and cannot be accessed.



To quit from RSMS

When the user needs to exit the RSMS, he/she can simply go to the **Main Menu** and click the **Exit** command button.



The Login window is displayed again. Click **Cancel**.



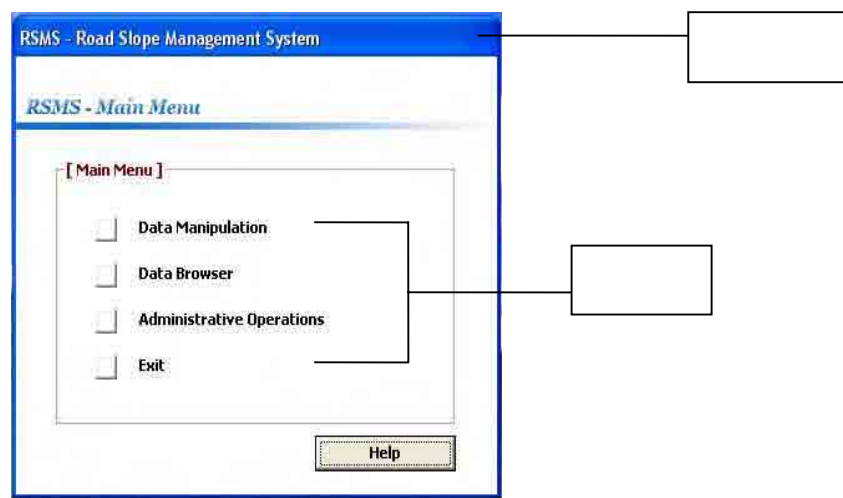
Section 3

NAVIGATING THROUGH THE SYSTEM (all users)

This section provides the basic information needed to familiarize the user with the Road Slope Management System (RSMS).

3.1 The RSMS application Window

After establishing correct entries in the Login window, the user is brought to the RSMS application Main Menu Window, which has the following components:



3.2 Title Bar

A Title Bar is the horizontal bar at the top of the RSMS application window that contains the title of the application system.

3.3 Menu

The Menu of the RSMS application window is where the following menus are located: **Data Manipulation**, **Data Browser**, **Administrative Operations** and **Exit**. Most menus (windows) of RSMS are organized in a tree-like structure. The **Main Menu** window shown above is the top menu, which is a root of the tree. In most menus (windows), there is an **Upper Menu** button, which will bring you back to the previous window.

SECTION 4

DATA MANIPULATION MODULE (Privileged user and Data Encoder)



This module contains menus for adding, importing, modifying, removing/un-removing and deleting records. Only authorized user can use this module. You can access the Data Manipulation Module by clicking the Data Manipulation button in the Main Menu Window.

4.1 Add Record (Privileged user and Data Encoder)

This allows the authorized user to add a new record to the database manually. You can also print the record before saving it to the database.

To add new record

1. From the Data manipulation window, click **Add new data** button to display the **Add new** dialog box.

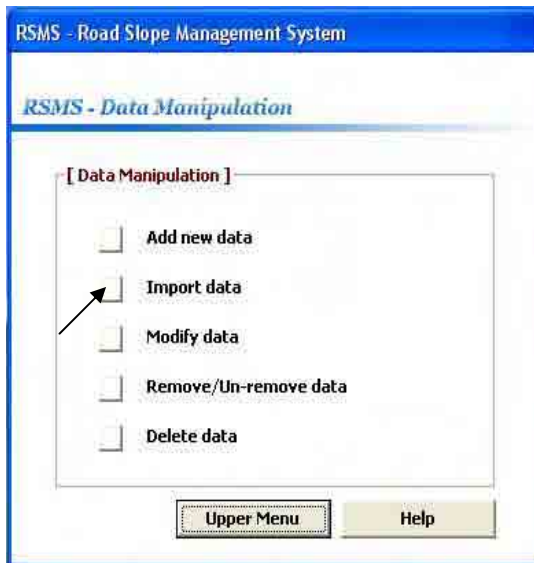


4.2 Import Data (Privileged user and Data Encoder)

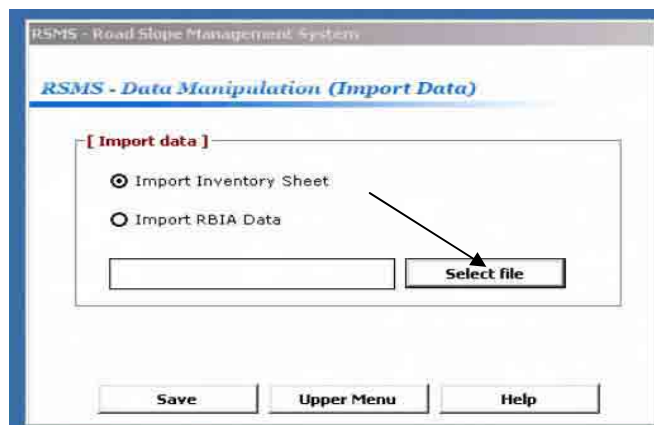
This allows an authorized user to import an Excel file into the database.

To import Excel files

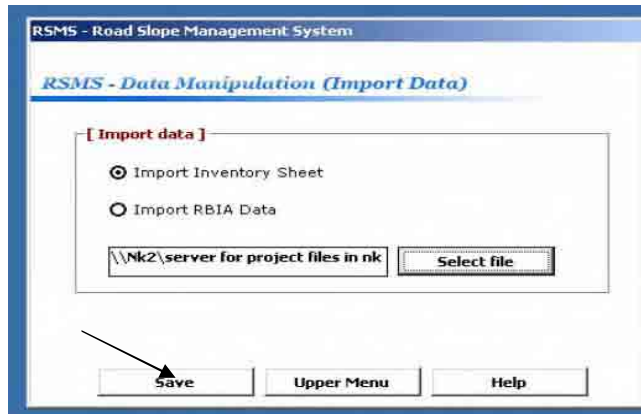
1. From the Data Manipulation window, click the **Import data button** to display the **Import Data** dialog box.



2. In the **Import data** dialog box, click the **Select file** button to select an Excel file you want to import. Note that the **Import Inventory Sheet** button is checked as the figure shown below.



3. After selecting an Excel file, click the **Save** button to import the data in the Excel file into the database.



4.3 Modify Data (Privileged user and Data Encoder)

This allows an authorized user to modify or edit the information for an existing record.

To modify data

1. From the Data Manipulation window, click the **Modify data** button to display the Modify Data dialog box.



2. In the Modify Data dialog box, choose the record you want to modify by clicking the **Next record** button to show the next record, or the **Previous record** button to show the previous record. You can also query the record you want to modify by clicking the **Exec query** button to display the choices of applicable queries. A detailed explanation about query functions is given in Section 5.

Viewing the next record

RSMS (Road Slope Management System)

RSMS - Data Manipulation (Modify queried data)

General	FRCDp	Detailed Survey	Countermeasures	IFA	Disaster
Survey Point ID :	<input type="text" value="SF00000CE"/>				
Excel Filename :	<input type="text" value="S00304CB_K0143_0053_L_CE_07.xls"/>				<input type="button" value="See Excel file"/>
Region :	Region VII				
Responsible DEO :	Cebu 4th District Engineering Office				
Road Name :	Toledo-Barili-Santander Rd				
Road ID :	<input type="text" value="R99997CB"/>				
Road Section ID :	S00304CB		Section Length :	79666 m	
Station :	From: K0143	53 m	Unit: K0143	471 m	
Length of survey :	<input type="text" value="418"/> m				
Side of Survey :	Left side of road				
Disaster Type :	Coastal Erosion				
Name of Inspector :	Amelia Caracut				
Date of Survey :	8 /10/2006				
Checked By :	<input type="text"/>				
Date Checked :	1 /15/2007				

<<

Viewing the previous record

RSMS (Road Slope Management System)

RSMS - Data Manipulation (Modify queried data)

General	FRCDp	Detailed Survey	Countermeasures	IFA	Disaster
Survey Point ID :	<input type="text" value="SF00000DF"/>				
Excel Filename :	<input type="text" value="S00852LZ_K0209_0047_R_DF_07.xls"/>				<input type="button" value="See Excel file"/>
Region :	Region II				
Responsible DEO :	Nueva Vizcaya Sub-District Engineering Office				
Road Name :	Daang Maharlika (L2)				
Road ID :	<input type="text" value="R00001LZ"/>				
Road Section ID :	S00852LZ		Section Length :	33167 m	
Station :	From: K0209	47 m	Unit: K0209	49 m	
Length of survey :	<input type="text" value="2"/> m				
Side of Survey :	Right side of road				
Disaster Type :	Debris Flow				
Name of Inspector :	Pelita V. Galvez				
Date of Survey :	8 /1 /2006				
Checked By :	<input type="text"/>				
Date Checked :	1 /15/2007				

<<

Using query to modify data

RSMS (Road Slope Management System)

RSMS - Data Manipulation (Modify queried data)

General | FRCDp | Detailed Survey | Countermeasures | IFA | Disaster

Survey Point ID : SF000000E

Excel Filename : S00304CB_K0143_0053_L_CE_07.xls

Region : Region VII

Responsible DEO : Cebu 4th District Engineering Office

Road Name : Toledo-Bar

Road ID : R99997CB

Road Section ID : S00304CB

Station : From: K0143 To: 79666 m

Length of survey : 471 m

Side of Survey : Left side of

Disaster Type : Coastal Erosion

Name of Inspector : Amelita Caracut

Date of Survey : 8 /10/2006

Checked By :

Date Checked : 1 /15/2007

<< < Prev record >>

- After selecting a record, enter the new information in the fields you want to modify.

RSMS (Road Slope Management System)

RSMS - Data Manipulation (Modify queried data)

General | FRCDp | Detailed Survey | Countermeasures | IFA | Disaster

Survey Point ID : SF000000E

Excel Filename : S00304CB_K0143_0771_L_RE_07.xls

Region : Region VII

Responsible DEO : Cebu 4th District Engineering Office

Road Name : Toledo-Bail-Santander Rd

Road ID : R99997CB

Road Section ID : S00304CB Section Length : 79666 m

Station : From: K0143 To: 771 m Until: K0143 To: 781 m

Length of survey : 10 m

Side of Survey : Left side of road

Disaster Type : River Erosion

Name of Inspector : Amelita Caracut

Date of Survey : 8 /10/2006

Checked By :

Date Checked : 1 /15/2007

<< < Prev record >>

- Click the **Save** button to update or save the modified record. Otherwise click the **Upper menu** button to go back to Data manipulation window without saving the changes.

'Checked by' was modified.

4.4 Remove/Un-remove Data (Hide/Un-hide data) (Authorized user only)

This allows an authorized user to switch the Remove Flag of the record to make the record retrievable or not. 'Retrievable' means that the record can be viewed by the user.

To remove/un-remove data

- From the Data Manipulation window, click the **Remove/Un-remove data** button to display the **Remove/Un-remove** dialog box.

2. In the **Remove/Un-remove** dialog box, select the record for which you want to change the status of the Remove Flag, by clicking the **Next record** button to show the next record, or **Previous record** button to show the previous record. You can also use a query in selecting a record by clicking the **Exec query** button to choose an applicable query in the **Query** dialog box. In the lower part of this window, the present status of the Remove-Flag is displayed.

RSMS (Road Slope Management System)

RSMS - Data Manipulation (Remove/Unremove data)

General | FRCDp | Detailed Survey | Countermeasures | IFA | Disaster

Survey Point ID : SF00000CE

Excel Filename : S00304CB_K0143_0053_L_CE_07.xls

Region : Region VII

Responsible DEO : Cebu 4th District Engineering Office

Road Name : Toledo-Barili-Santander Rd

Road ID : R99997CB

Road Section ID : S00304CB

Station : K0143 53 m Unit: K0143 471 m

Length of survey : 418 m

Side of Survey : Left side of road

Disaster Type : Coastal Erosion

Name of Inspector : Amelia Caracut

Date of Survey : 18/10/2006

Checked By :

Date Checked : 11/15/2007

Hide Record : OFF

<< < Prev record Next record > >>

This shows the present status of Remove-Flag of this record.

3. Click the **Switch Remove/Un-remove** button to change the status of the Remove Flag. You can also switch the Remove Flag of all retrieved records by clicking the **Switch Remove Flag of all retrieved records** button.

Switching the Remove Flag of the selected record

RSMS (Road Slope Management System)

RSMS - Data Manipulation (Remove/Unremove data)

General | FRCDp | Detailed Survey | Countermeasures | IFA | Disaster

Survey Point ID : S000000GE

Excel Filename : S00304CB_K0143_0053_L_CE_07.xls

Region : Region VII

Responsible DEO : Cebu 4th District Engineering Office

Road Name : Toledo-Basil-Santander Rd

Road ID : R99997CB

Road Section ID : S00304CB

Station : K0143 53 m Unit: K0143 471 m

Length of survey : 418 m

Side of Survey : Left side of road

Disaster Type : Coastal Erosion

Name of Inspector : Amelia Caracut

Date of Survey : 8/10/2006

Checked By :

Date Checked : 11/19/2007

Hide Record :

<< < Prev record > Next record >>

Switching the remove flags of all retrieved records

RSMS (Road Slope Management System)

RSMS - Data Manipulation (Remove/Unremove data)

General | FRCDp | Detailed Survey | Countermeasures | IFA | Disaster

Survey Point ID : 5F00000CE
 Excel Filename : S00304CB_K0143_0053_L_CE_07.xls See Excel file
 Region : Region VII
 Responsible DEO : Cebu 4th District Engineering Office
 Road Name : Toledo-Banil-Santander Rd
 Road ID : R9997CB
 Road Section ID : S00304CB
 Station : K0143 53 m Unit: K0143 471 m
 Length of survey : 418 m
 Side of Survey : Left side of road
 Disaster Type : Coastal Erosion
 Name of Inspector : Amelia Caracut
 Date of Survey : 8/23/2008
 Checked By :
 Date Checked : 1/15/2007
 Hide Record : OFF

Exec query | Switch Remove Flag of this record | << | < Prev record | Next record > | >>
 Save | Switch Remove Flag of all retrieved records | Upper Menu | Print | Help

- Click the **Save** button to save the change. To cancel the change, simply click the **Upper Menu** button without clicking **Save**.

RSMS (Road Slope Management System)

RSMS - Data Manipulation (Remove/Unremove data)

General | FRCDp | Detailed Survey | Countermeasures | IFA | Disaster

Survey Point ID : 5F00000CE
 Excel Filename : S00304CB_K0143_0053_L_CE_07.xls See Excel file
 Region : Region VII
 Responsible DEO : Cebu 4th District Engineering Office
 Road Name : Toledo-Banil-Santander Rd
 Road ID : R9997CB
 Road Section ID : S00304CB
 Station : K0143 53 m Unit: K0143 471 m
 Length of survey : 418 m
 Side of Survey : Left side of road
 Disaster Type : Coastal Erosion
 Name of Inspector : Amelia Caracut
 Date of Survey : 8/23/2008
 Checked By :
 Date Checked : 1/15/2007
 Hide Record : ON

Exec query | Switch Remove Flag of this record | << | < Prev record | Next record > | >>
 Save | Switch Remove Flag of all retrieved records | Upper Menu | Print | Help

The status was changed. This change becomes effective after the **Save** button is clicked.

4.5 Delete Data (Application Support Administrator only)

This allows an authorized user to delete data from the database. Only data for which the remove flag is 'ON' can be deleted. The user should be very careful since the deleted records cannot be recovered.

To delete data

1. From the Data Manipulation window, click the **Delete data** button to display the **Delete data** dialog box.



2. In the **Delete data** dialog box, select a record you want to delete by clicking the **Next record** button to show the next record, or the **Previous record** button to show the previous record. You can also use a query in selecting a record by clicking the **Exec query** button to choose an applicable query in the **Query** dialog box.

RSMS (Road Slope Management System)

RSMS - Data Manipulation (Delete data from database)

General | FRCDp | Detailed Survey | Countermeasures | IFA | Disaster

Survey Point ID : SF000003C
 Excel Filename : S00267CB_K0035_0027_R_SC_07.xls
 Region : Region VII
 Responsible DEO : Cebu 3rd District Engineering Office
 Road Name : Cebu-Balamban Transcentral Highway
 Road ID : R00012CB
 Road Section ID : S00267CB
 Station : K0035 27 m Until: K0035 151 m
 Length of survey : 124 m
 Side of Survey : Right side of road
 Disaster Type : Soil Slope Collapse
 Name of Inspector : Felka V. Galvez
 Date of Survey : 8/16/2004
 Checked By :
 Date Checked : 11/15/2007

<< < Prev record Next record >> >>

3. Click the **Delete this record** button to delete the selected record, or click the **Delete all retrieved records** button to delete all retrieved records.

Deleting the selected record

RSMS (Road Slope Management System)

RSMS - Data Manipulation (Delete data from database)

General | FRCDp | Detailed Survey | Countermeasures | IFA | Disaster

Survey Point ID : SF000003C
 Excel Filename : S00267CB_K0035_0027_R_SC_07.xls
 Region : Region VII
 Responsible DEO : Cebu 3rd District Engineering Office
 Road Name : Cebu-Balamban Transcentral Highway
 Road ID : R00012CB
 Road Section ID : S00267CB
 Station : K0035 27 m Until: K0035 151 m
 Length of survey : 124 m
 Side of Survey : Right side of road
 Disaster Type : Soil Slope Collapse
 Name of Inspector : Felka V. Galvez
 Date of Survey : 8/16/2004
 Checked By :
 Date Checked : 11/15/2007

<< < Prev record Next record >> >>


Deleting all retrieved records

RSMS (Road Slope Management System)

RSMS - Data Manipulation (Delete data from database)

General	FRCDp	Detailed Survey	Countermeasures	IFA	Disaster		
Survey Point ID :	<input type="text" value="S000005C"/>						
Excel Filename :	<input type="text" value="S00267CB_K0035_0027_F_SC_07.xls"/>				<input type="button" value="See Excel file"/>		
Region :	<input type="text" value="Region VII"/>						
Responsible DEO :	<input type="text" value="Cebu 3rd District Engineering Office"/>						
Road Name :	<input type="text" value="Cebu-Balamban Transcentral Highway"/>						
Road ID :	<input type="text" value="R00012CB"/>						
Road Section ID :	<input type="text" value="S00267CB"/>						
Station :	<input type="text" value="K0035"/>	<input type="text" value="27"/>	m	Unit :	<input type="text" value="K0035"/>	<input type="text" value="151"/>	m
Length of survey :	<input type="text" value="124"/>					m	
Side of Survey :	<input type="text" value="Right side of road"/>						
Disaster Type :	<input type="text" value="Soil Slope Collapse"/>						
Name of Inspector :	<input type="text" value="Pelka V. Galvez"/>						
Date of Survey :	<input type="text" value="8/16/2005"/>						
Checked By :	<input type="text"/>						
Date Checked :	<input type="text" value="1/13/2007"/>						

<< < Prev record >> >>



SECTION 5

DATA BROWSER MODULE and QUERY (all users)

The DATA BROWSER MODULE allows the user to export a record or a list of records to an Excel file. A parameterized query can be used to find the record of interest. You can access the Data Browser by clicking the **Data Browser** button in the **Main Menu**. All RSMS users can use this module. The data browser window is shown below.

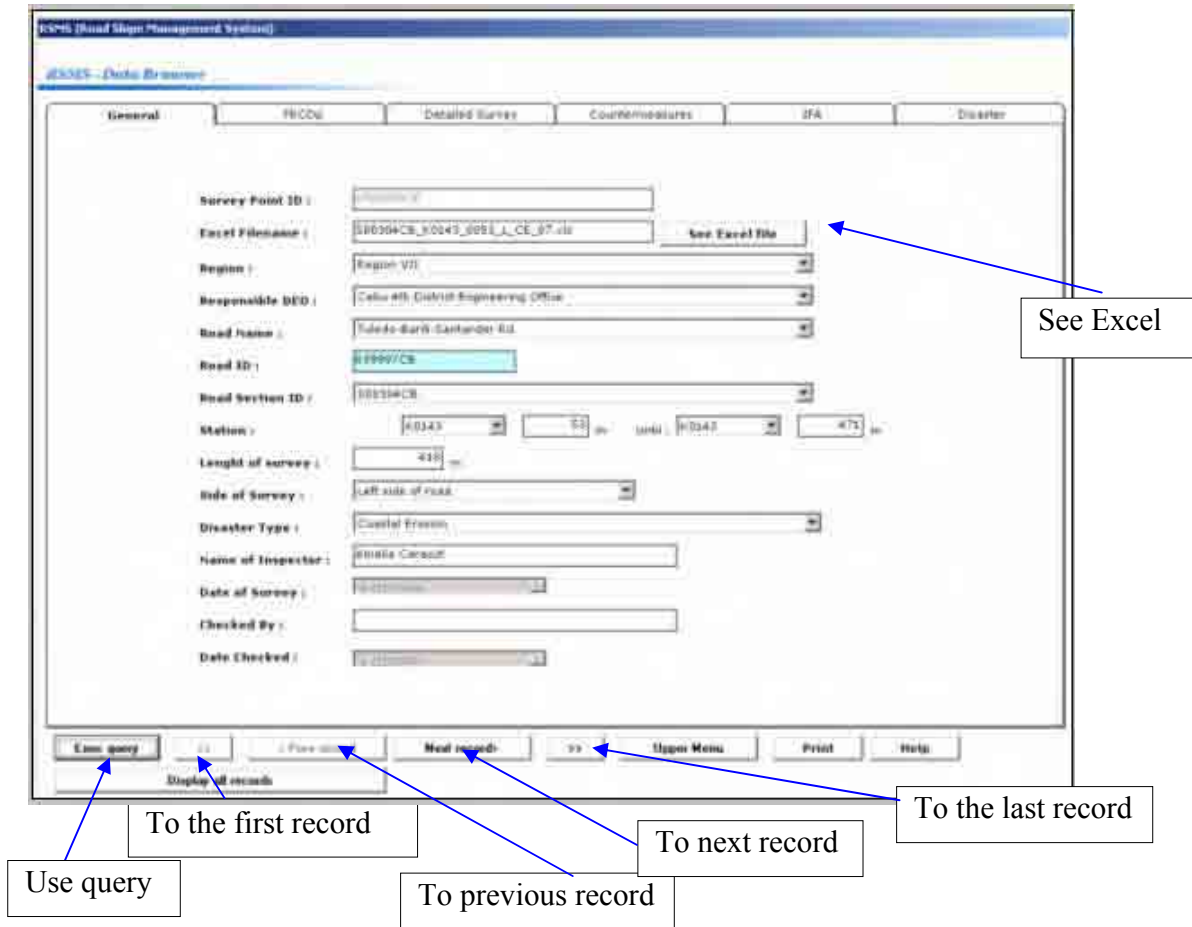
The screenshot shows the 'RSMS - Data Browser' window. It has a title bar 'RSMS (Road Sign Management System)' and a menu bar with 'General', 'PICCU', 'Detailed Survey', 'Countermeasures', 'IFA', and 'Disaster'. The 'General' tab is active. The form contains the following fields:

- Survey Point ID: [Text box]
- Excel Filename: [Text box] [See Excel file]
- Region: [Region VII]
- Responsible BEO: [Civil 4th District Engineering Office]
- Road Name: [Tulido-Burib Sanandu Rd]
- Road ID: [R1009/CE]
- Road Section ID: [R0104CB]
- Station: [K0343] [50] [K044] [475]
- Length of survey: [410]
- Side of Survey: [Left side of road]
- Disaster Type: [Coastal Erosion]
- Name of Inspector: [RIMBA Caracut]
- Date of Survey: [Date field]
- Checked By: [Text box]
- Date Checked: [Date field]

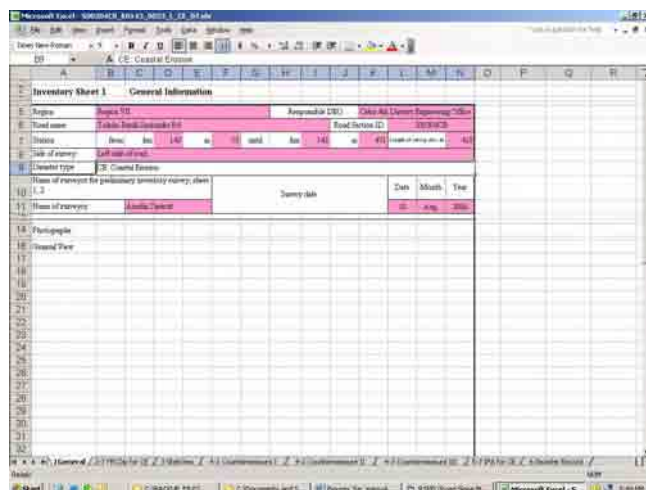
At the bottom, there are buttons: 'Exec query', '<<', '>>', 'Next record', '>>', 'Upper Menu', 'Print', and 'Help'. A 'Display all records' button is also present.

5.1 To Export a Record

1. In the **Data Browser** dialog box, select the record you want to export by clicking the **Next record** button to show the next record, or the **Previous record** button to show the previous record. You can also use the **Exec query** button to query a record or a list of records you want to export. A detailed explanation on **Exec query** will be given later. '<<' button shows the first (retrieved) record while '>>' button shows the last record on the window.
2. Click the **See Excel file** button to export the record to an Excel file.



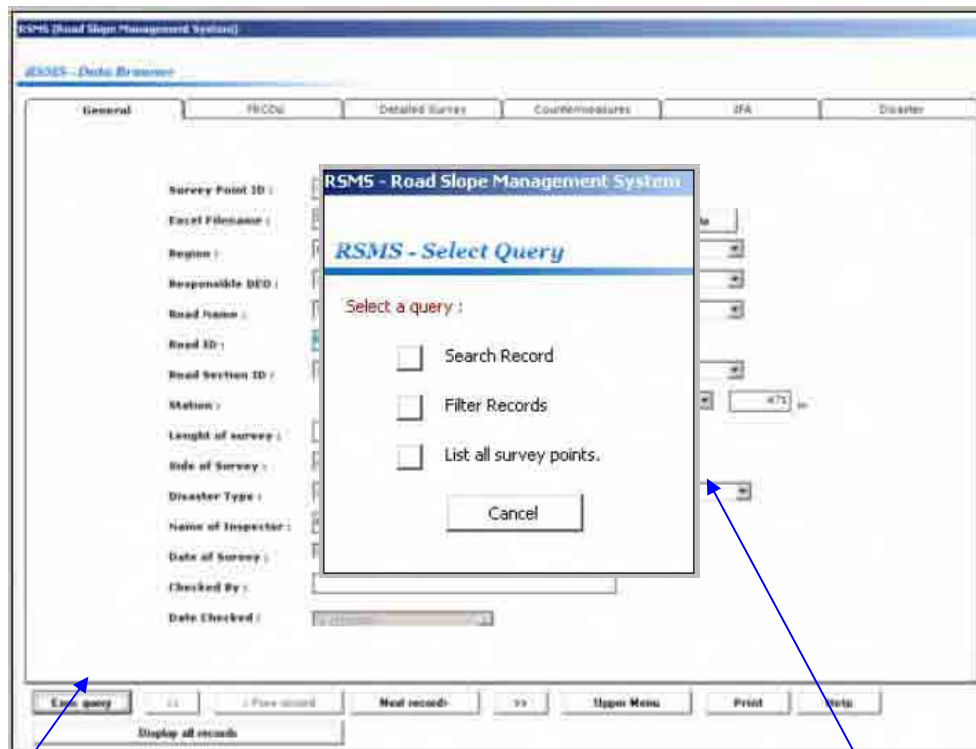
3. Click the **See Excel file** button to export the record to an Excel file.



5.2 Using the Query.

A brief explanation on the query function used to search for records is given here. This query function can also be used in other modules such as data modification.

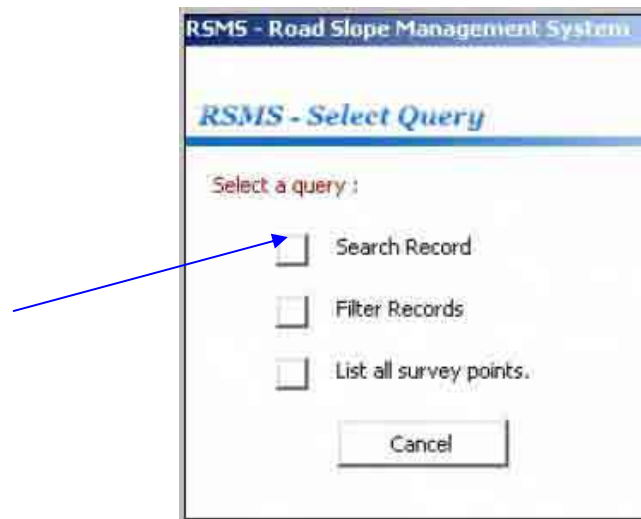
1. In the Data Browser dialog box, click the **Exec query** button. A menu is displayed at the center of the screen which enables you to select what kind of query you want to use.



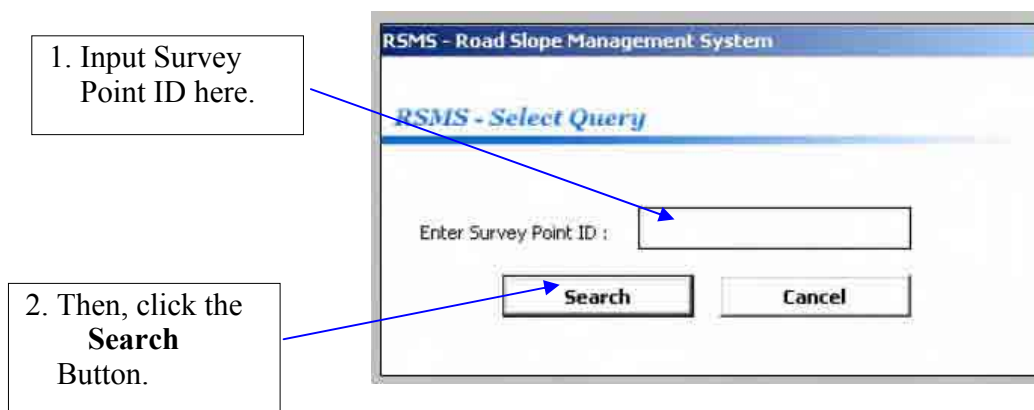
2. Click this button to use query function.

1. Query menu is popped up.

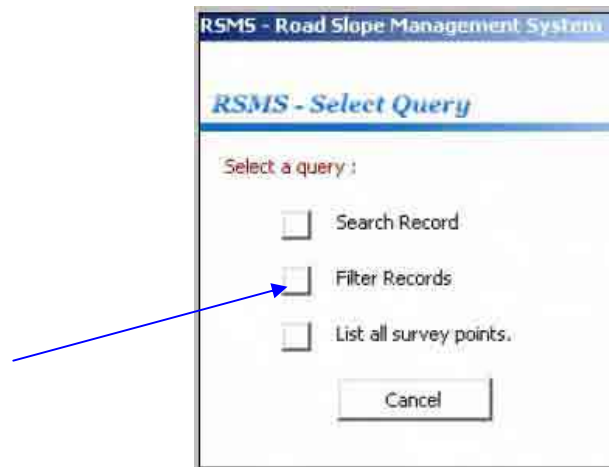
2. Select one of the following three, or click Cancel to go back to Data Browser Window.
 - a) Search record
 - b) Filter records
 - c) List all survey points
2. You can browse the content of one record (one survey point) using “Search record”. However, you should know the survey point ID of the point you want to browse in advance.



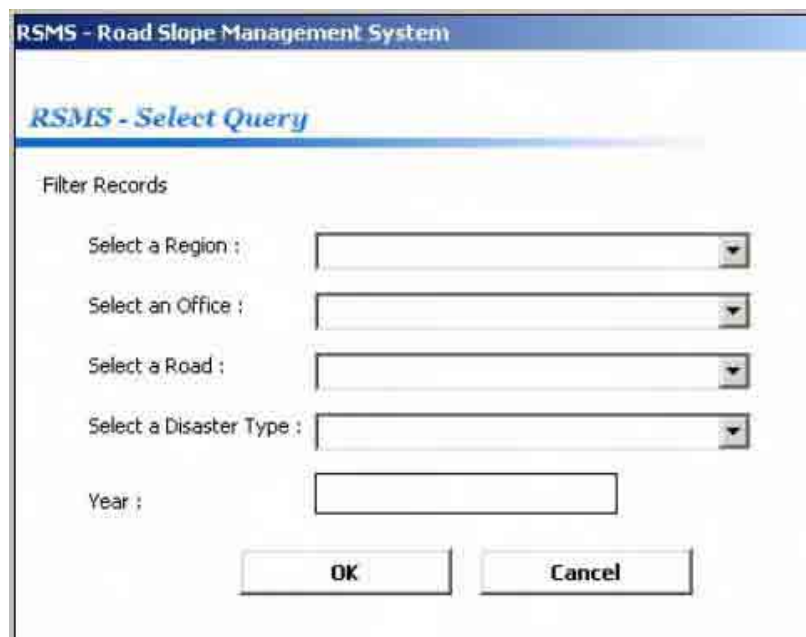
A new window shown below appears. Input the survey point ID of your interest, and click **Search**. The stored information of the survey point is displayed in the data browser window. If you specified a wrong survey point ID, a warning message is displayed. You can re-input the correct survey point ID, or go back to the Select Query Menu by clicking **Cancel**.



3. You can search the records which satisfy the condition you specified. This is sometimes called conditional query(ing). To use this function, select Filter Records from the Query menu (see below).



A Filter window shown below appears. You can filter records by specifying a Region, an Engineering Office, a Road name, a disaster type, the survey year, or their combination. ‘Combination’ means that if you specify more than one condition, the intersection in mathematical terms will be retrieved. An example of the combination is shown later.



For easy and prompt setting of the filter, a combo-box (drop-down menu) is available for each item.

For example, if you specify only the disaster type as “Debris Flow” and click **OK**, all of “Debris Flow” data will be selected whichever the region, the engineering office, the road name, or the survey year would be.

RSMS - Road Slope Management System

RSMS - Select Query

Filter Records

Select a Region :

Select an Office :

Select a Road :

Select a Disaster Type : **Debris Flow**

Year :

OK **Cancel**

In this example, only disaster type is specified to filter data. All survey points for 'Debris Flow' will be retrieved.

Or, for example, if you specify the region as "Cordillera Administrative Region (CAR)" and the disaster type as "Road Slip", and click **OK**, all "Road Slip" data belong to Region CAR will be retrieved (see the figure below).

RSMS - Road Slope Management System

RSMS - Select Query

Filter Records

Select a Region : **Cordillera Administrative Region**

Select an Office :

Select a Road :

Select a Disaster Type : **Road Slip**

Year :

OK **Cancel**

In this example, The combination of Region name and disaster type is used to filter data. All survey points in 'CAR Region' data for 'Road Slip' will be retrieved.

If, you click **OK** on the Query Filter window shown above, the records satisfying the conditions are listed as shown below.

Survey ID	Excel Filename	Region Name	Engineer
SP00151R	S00393L2_K0217_0274_L_RS_07.xls	Cordillera Administrative Region	Benquet 1st
SP00152R	S00393L2_K0218_0695_L_RS_07.xls	Cordillera Administrative Region	Benquet 1st
SP00153R	S00393L2_K0218_0661_L_RS_07.xls	Cordillera Administrative Region	Benquet 1st
SP00154R	S00393L2_K0218_0836_L_RS_07.xls	Cordillera Administrative Region	Benquet 1st
SP00155R	S00393L2_K0219_0800_L_RS_07.xls	Cordillera Administrative Region	Benquet 1st
SP00156R	S00393L2_K0219_0135_L_RS_07.xls	Cordillera Administrative Region	Benquet 1st
SP00157R	S00393L2_K0219_0319_L_RS_07.xls	Cordillera Administrative Region	Benquet 1st
SP00158R	S00393L2_K0219_0456_L_RS_07.xls	Cordillera Administrative Region	Benquet 1st
SP00159R	S00393L2_K0219_0533_L_RS_07.xls	Cordillera Administrative Region	Benquet 1st
SP00160R	S00393L2_K0220_0300_L_RS_07.xls	Cordillera Administrative Region	Benquet 1st

Chart type: Bar | Graph By: Disaster Type

INVENTORY SURVEY IN CORDILLERA ADMINISTRATIVE REGION GRAPH BY DISASTER TYPE

Bar chart showing 380 records for Road Slip.

Buttons: Export data to excel, Print Chart, Cancel

Click **Export data to Excel** to export this list to an Excel file.

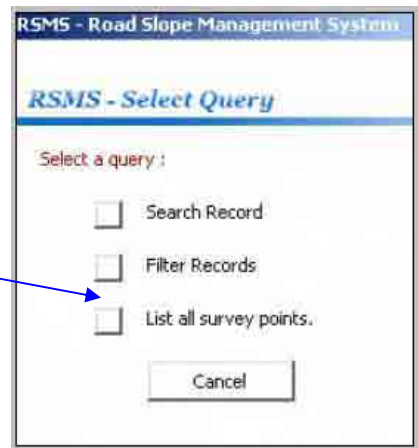
Click **Cancel** to dismiss this window.

By clicking the **Export data to Excel** button, you can export this list into an Excel file in the form of an integrated sheet. That list window will be dismissed by clicking the **Cancel** button.

The first record which satisfies the filter conditions is displayed in **Data Browser** dialog box. You can roam to and fro using the **Next record** button, the **Previous record** button, ' <<' button, or ' >>' button.

- Clicking the **“List all survey points”** button displays a list of all the stored records.

Click **List all survey points** to export the list of all points into an Excel file.



A list and a chart are displayed as shown below.

Survey ID	Excel Filename	Region Name	Engineering
SP00000CE	S00904CB_R0143_0953_L_CE_07.xls	Region VII	Cebu 4th Di
SP00000DF	S00852LZ_K0209_0047_R_DF_07.xls	Region II	Nueva Vizca
SP00000LS	S00120LT_K1006_0611_L_LS_07.xls	Region VIII	Southern Le
SP00000RC	S00852LZ_K0209_0093_R_RC_07.xls	Region II	Nueva Vizca
SP00000RE	S00904CB_K0143_0775_L_RE_07.xls	Region VII	Cebu 4th Di
SP00000RS	S00852LZ_K0209_0046_L_RS_07.xls	Region II	Nueva Vizca
SP00001CE	S00904CB_R0143_0196_L_CE_07.xls	Region VII	Cebu 4th Di
SP00001DF	S00852LZ_K0209_0091_R_DF_07.xls	Region II	Nueva Vizca
SP00001LE	S00120LT_K1006_0745_L_LS_07.xls	Region VIII	Southern Le
SP00001RC	S00123SM_K0844_0000_L_RC_07.xls	Region VIII	Samar 2nd I

INVENTORY SURVEY NATIONWIDE GRAPH BY DISASTER TYPE

Legend:

- Coastal Erosion
- Debris flow
- Landslide
- River Erosion
- Road Slip
- Rock Slope Collapse
- Soil Slope Collapse

The following functions are available from this window.

- 1) Click the **Export data to Excel** button to export the list into an Excel file in the form of an integrated sheet. The chart (a pie chart in the above example) is exported in another sheet of the Excel file.
- 2) Click the **Cancel** button to go back to the **Data Browser** dialog box.
- 3) Select the chart type, a pie chart or bar chart, from the drop down menu.
- 4) Select the type of classification (by Region, by Road, etc). By default, the graph is drawn by classification of the disaster type.

The screenshot shows the 'RSMS - Export' dialog box. At the top is a table with the following data:

Survey ID	Excel Filename	Region Name	Engineer
SPO0000CE	S00304CB_K0143_0053_L_CE_07.xls	Region VII	Cebu 4th Di
SPO0000DF	S00552L2_K0209_0047_R_DF_07.xls	Region II	Nueva Vizca
SPO0000LE	S00220LT_K1006_0611_L_LE_07.xls	Region VIII	Southern La
SPO0000RC	S00552L2_K0209_0093_R_RC_07.xls	Region II	Nueva Vizca
SPO0000RE	S00304CB_K0143_0771_L_RE_07.xls	Region VII	Cebu 4th Di
SPO0000RS	S00552L2_K0209_0046_L_RS_07.xls	Region II	Nueva Vizca
SPO0001CE	S00304CB_K0146_0106_L_CE_07.xls	Region VII	Cebu 4th Di
SPO0001DF	S00552L2_K0209_0091_R_DF_07.xls	Region II	Nueva Vizca
SPO0001LE	S00220LT_K1006_0745_L_LE_07.xls	Region VIII	Southern La
SPO0001RC	S00123SM_K0844_0000_L_RC_07.xls	Region VIII	Tamar Ind I

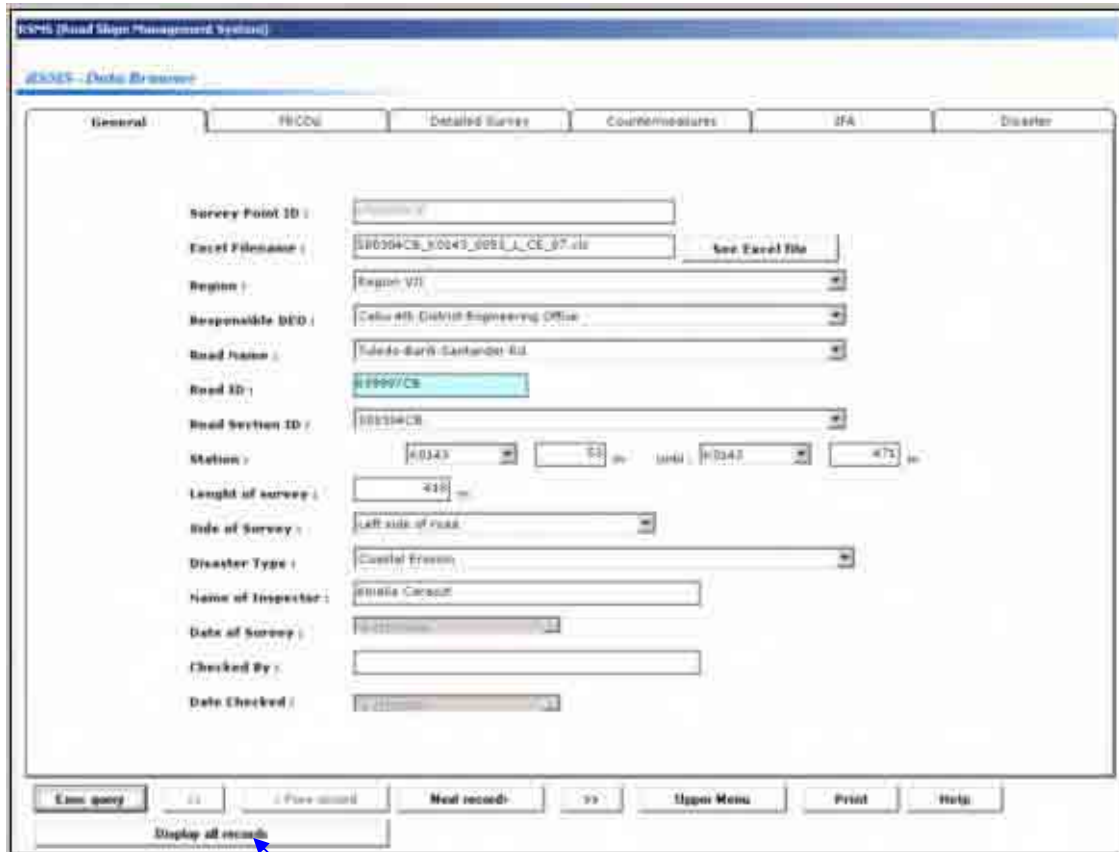
Below the table is the 'Export data to Excel' button. Underneath are two dropdown menus: 'Chart type' (set to 'Pie') and 'Graph By' (set to 'Disaster Type'). A pie chart titled 'INVENTORY SURVEY IN GRAPH BY DISASTER TYPE' is displayed, with a legend on the right showing the following categories and percentages:

- 4% (Red)
- 6% (Green)
- 6% Landslide (Blue)
- 4% River Erosion (Yellow)
- 41% Road Slip (Magenta)
- 15% Rock Slope Collapse (Cyan)
- 27% Soil Slope Collapse (Black)

At the bottom are 'Print Chart' and 'Cancel' buttons. Two callout boxes provide instructions: one points to the 'Pie' dropdown with the text 'Change the chart type Bar chart / Pie chart', and another points to the 'Disaster Type' dropdown with the text 'Change the classification of the chart.'

5.3 Exporting List of All Records to an Excel File

There is another button, “**Display all records**” in the **Data Browser** dialog box. This shows the same list described in the previous section.



Click **Display all records** to export the list of all points into an Excel file.

SECTION 6. ADMINISTRATIVE OPERATION MODULE

An authorized user might have to change or reset a password, add or delete a user, grant or revoke privileges, start or shutdown the database management system, and backup or restore the database.

The Administrative Operation module is accessed by clicking the **Administrative Operation** button in the **Main Menu** window. The Administrative Operation window shown below appears.

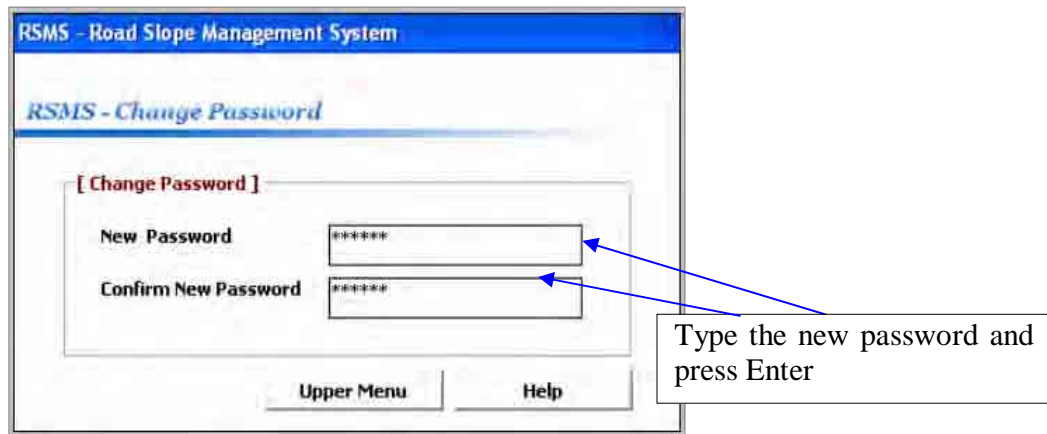


6.1 To Change Password

1. From the Administrative Operation window, click the **Change Password** button to display the Change Password dialog box.



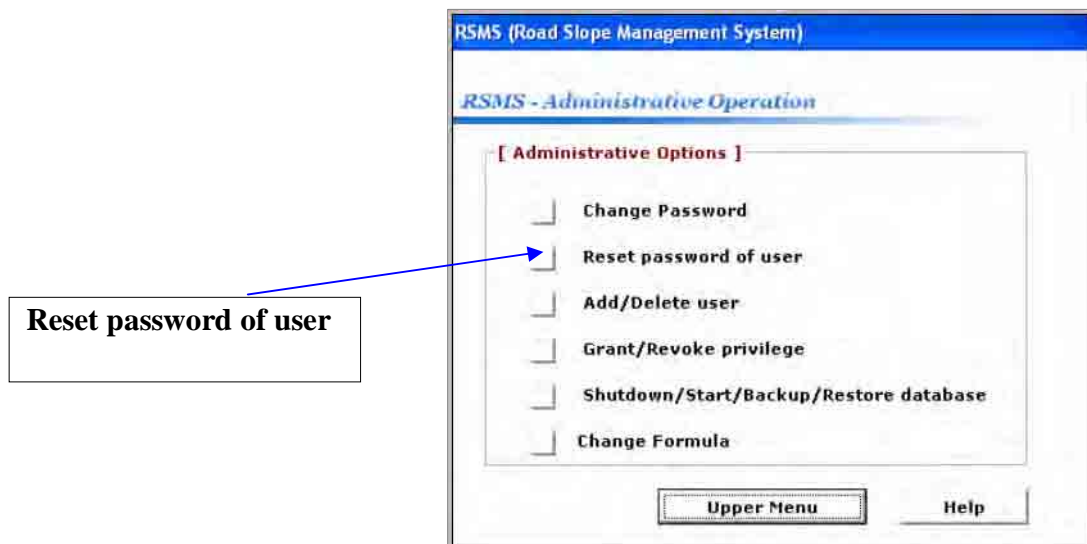
2. In the Change Password dialog box, enter a new password and press **Enter** to save. **Note: A password can contain up to 8 characters and is case sensitive.**



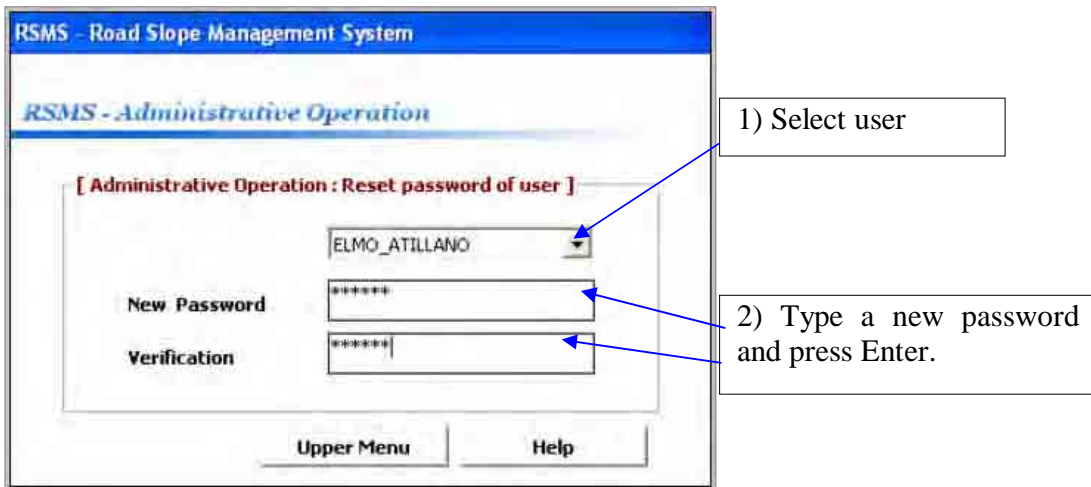
6.2 To Reset Password (Privileged user only)

Privileged users can reset passwords of other users when the users forget his/her password and also the answer to the secret question.

1. From the Administrative Operation window, click the **Reset Password** button to display the Reset Password dialog box.

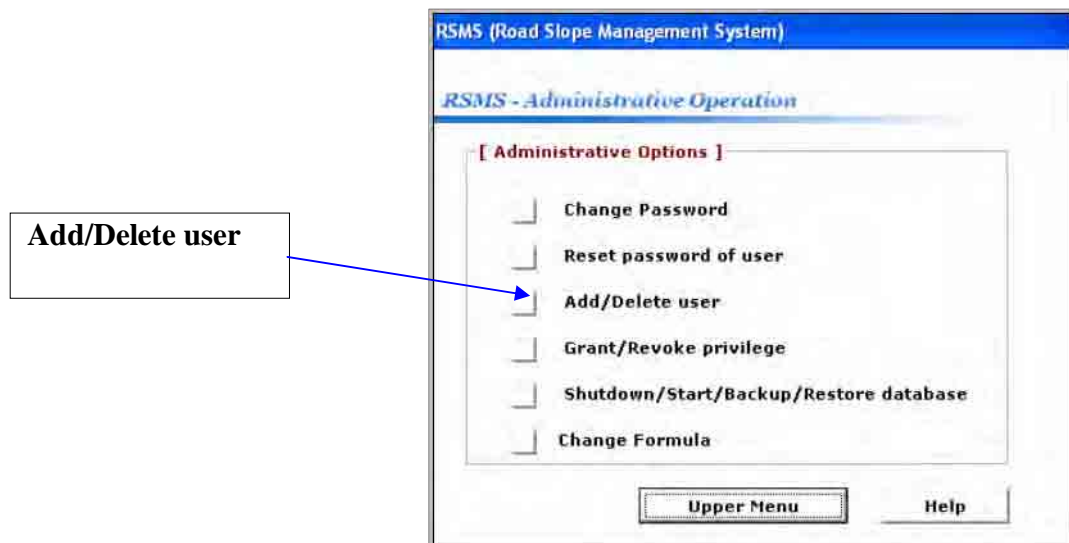


2. In the Reset Password dialog box, select the user whose password you want to reset.
3. Type a new password and press **Enter** to save. **Note: A password can contain up to 8 characters and is case sensitive.**

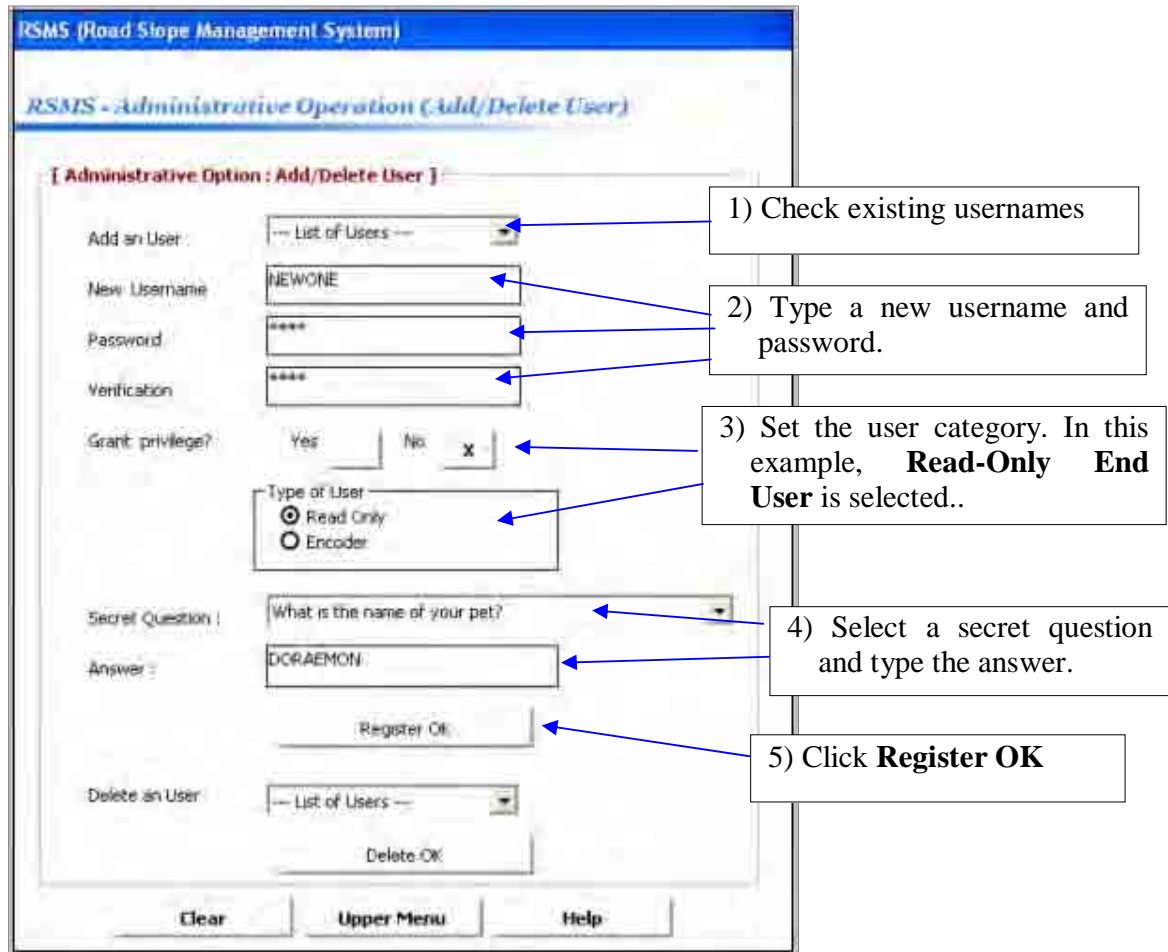


6.3 To Add User (Privileged user only)

1. From the Administrative Operation window, click the **Add/Delete User** button to display the Add/Delete User dialog box.

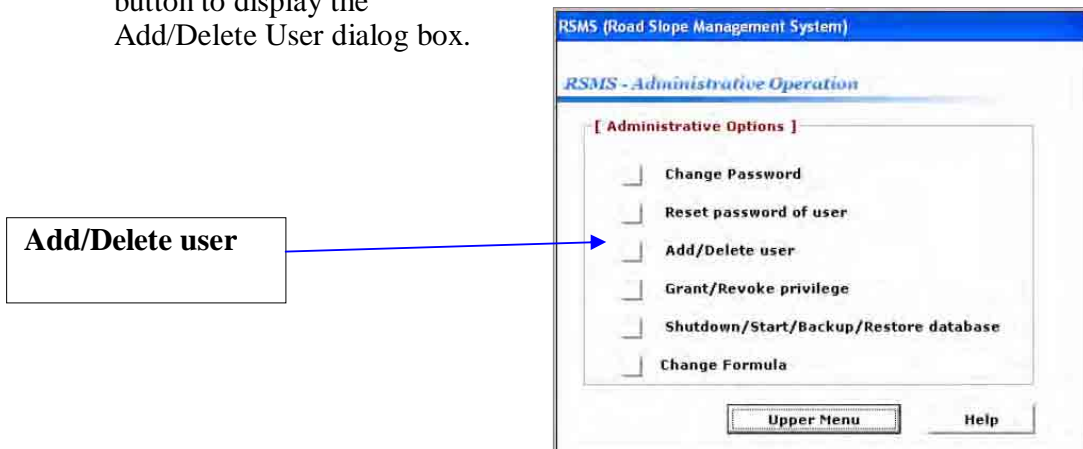


2. In the Add/Delete User dialog box, type a new username and password. You can see a list of existing usernames in advance.
3. Click the **Yes** button to grant the privilege to the user, or click **No**.
4. Select the user category (Read-Only End User/Data Encoder/User Coordinator/Support Administrator)
5. Select a secret question and type the answer given by the user.
6. Click the **Register OK** button to save the information to the database.



6.4 To Delete User (Privileged user only)

1. From the Administrative Operation window, click the **Add/Delete User** button to display the Add/Delete User dialog box.



2. In the Add/Delete User dialog box, select a user you want to delete in the combo box.

RSMS (Road Slope Management System)

RSMS - Administrative Operation (Add/Delete User)

[Administrative Option : Add/Delete User]

Add an User: -- List of Users --

New Username: []

Password: []

Verification: []

Grant privilege? Yes [] No [x]

Type of User:
 Read Only
 Encoder

Secret Question: -- Select Question --

Answer: []

Register OK

Delete an User: 123456

Delete OK

Clear Upper Menu Help

1) Select a user to be deleted

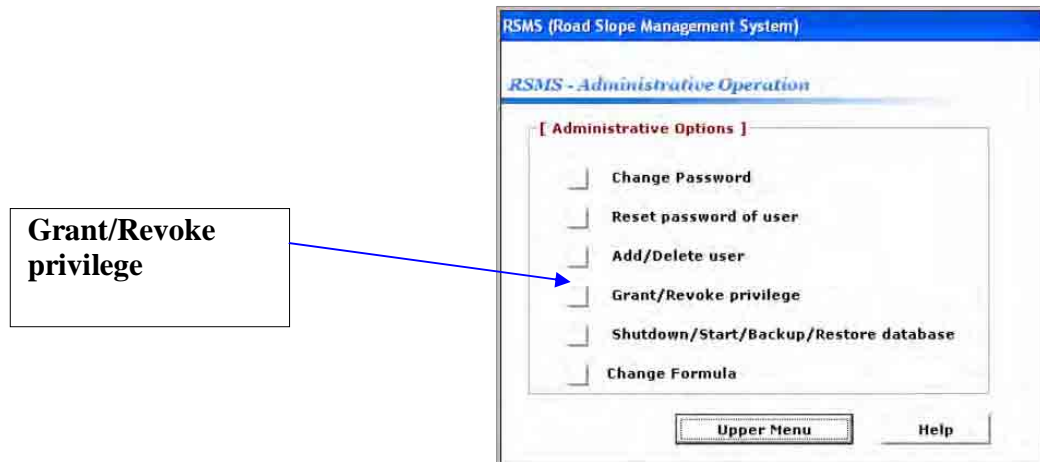
2) Click **Delete OK**

3. Click the **Delete OK** button to delete the user.

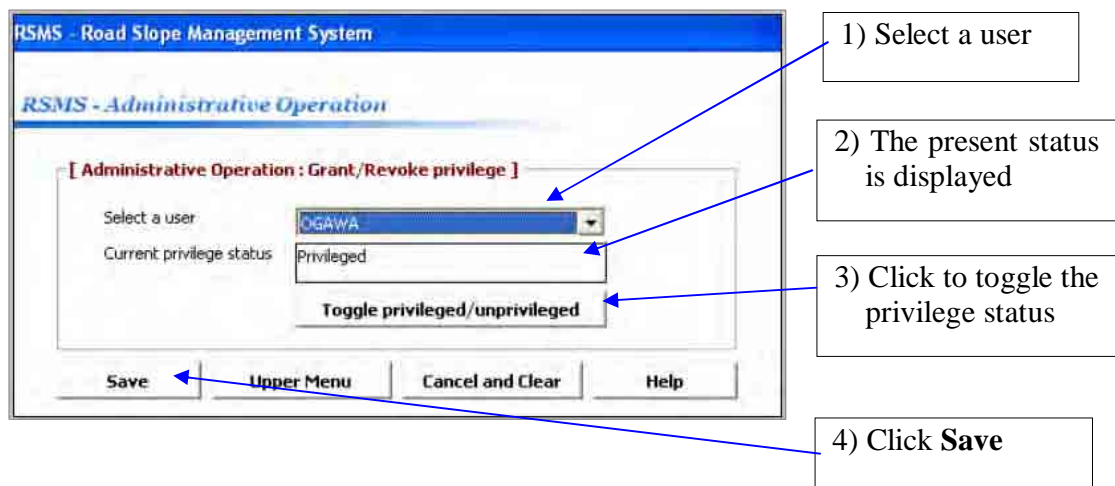
6.5 To Grant or Revoke Privilege (Privileged user only)

The privilege to use RSMS is granted, and may be revoked. These functions are carried out by **Application Support Administrators**.

1. From the Administrative Operation window, click the **Grant/Revoke Privilege** button to display the Grant/Revoke Privilege dialog box.



2. In the Grant/Revoke Privilege dialog box (shown below), select the username required. The current status of the user is displayed.

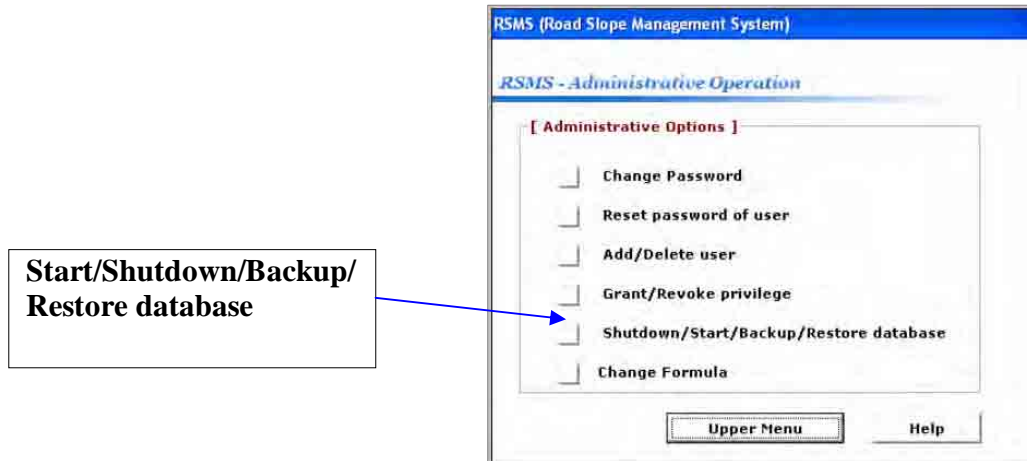


3. Click the **Toggle privileged/unprivileged** button to switch the user's status.
4. Click the **Save** button to save changes.

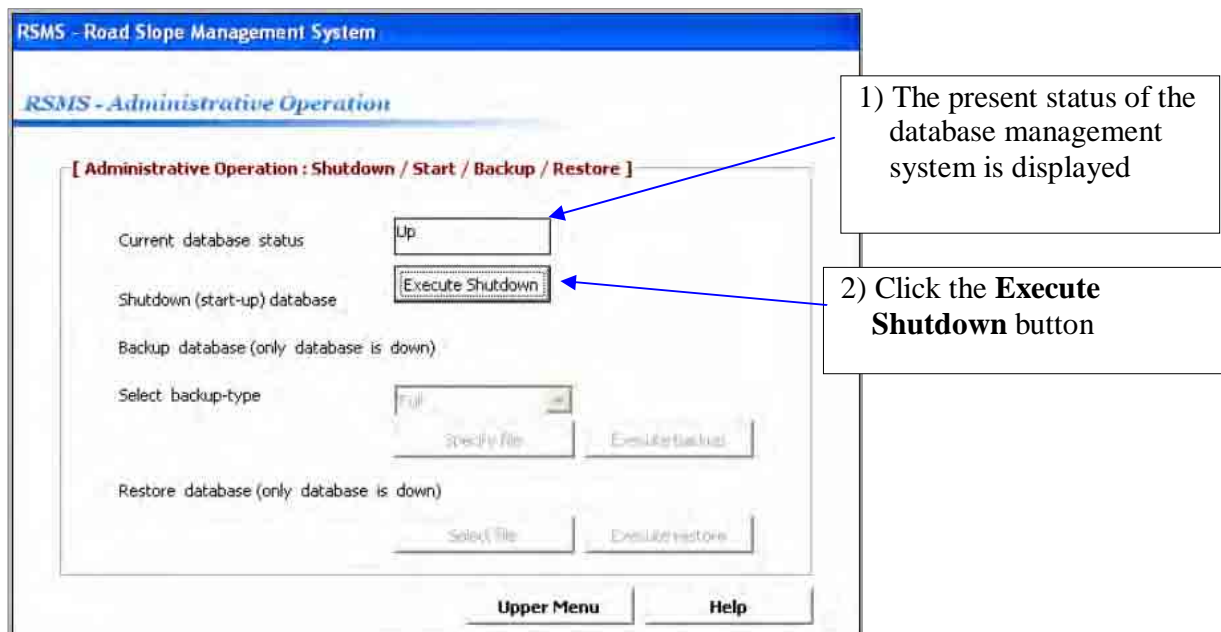
6.6 To Shutdown the Database Management Application (Application Support Administrators only)

The administrators should know that 'shutdown' database management system does not mean shutting down the power of the server PC. It means the shutdown of the database from the viewpoint of the software. The shutdown is necessary before executing the backup. After the backup is finished, the administrators might have to re-start the database management system so that the users can utilize RSMS application again.

1. From the Administrative Operation window, click the **Start/Shutdown/Backup/Restore database** button to display Start/Shutdown/Backup/Restore database dialog box.



2. In the Start/Shutdown/Backup/Restore database dialog box shown below, the present status of the database management system (Up or Down) is displayed. Click the **Execute Shutdown** button to shutdown the database management system.



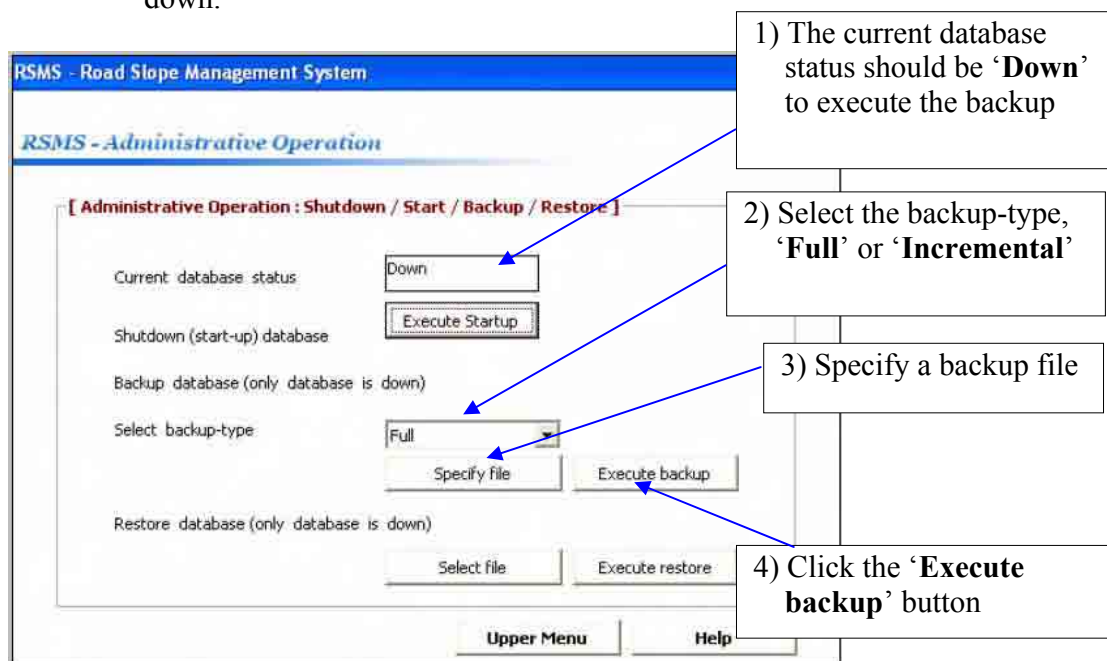
6.7 To Start the Database Management Application (Application Support Administrators only)

In order to use RSMS database application, for example, to browse the data, the status of the database management system should be 'Up'. When the server PC is powered on, the database management system is automatically started. However, for example, after the database backup was executed, the manual re-start of the database management system is necessary.

1. From the Administrative Operation window, click the **Start/Shutdown/Backup/Restore database** button to display Start/Shutdown/Backup/Restore database dialog box.
2. In the Start/Shutdown/Backup/Restore database dialog box, click the **Execute Startup** button to start the database management system.

6.8 To Backup the Database (Application Support Administrators only)

1. From the Administrative Operation window, click the **Start/Shutdown/Backup/Restore database** button to display Start/Shutdown/Backup/Restore database dialog box.
2. In the Start/Shutdown/Backup/Restore database dialog box, click the **Execute Shutdown** button to shutdown the database management system if necessary. You can only backup the database when the database management system is down.

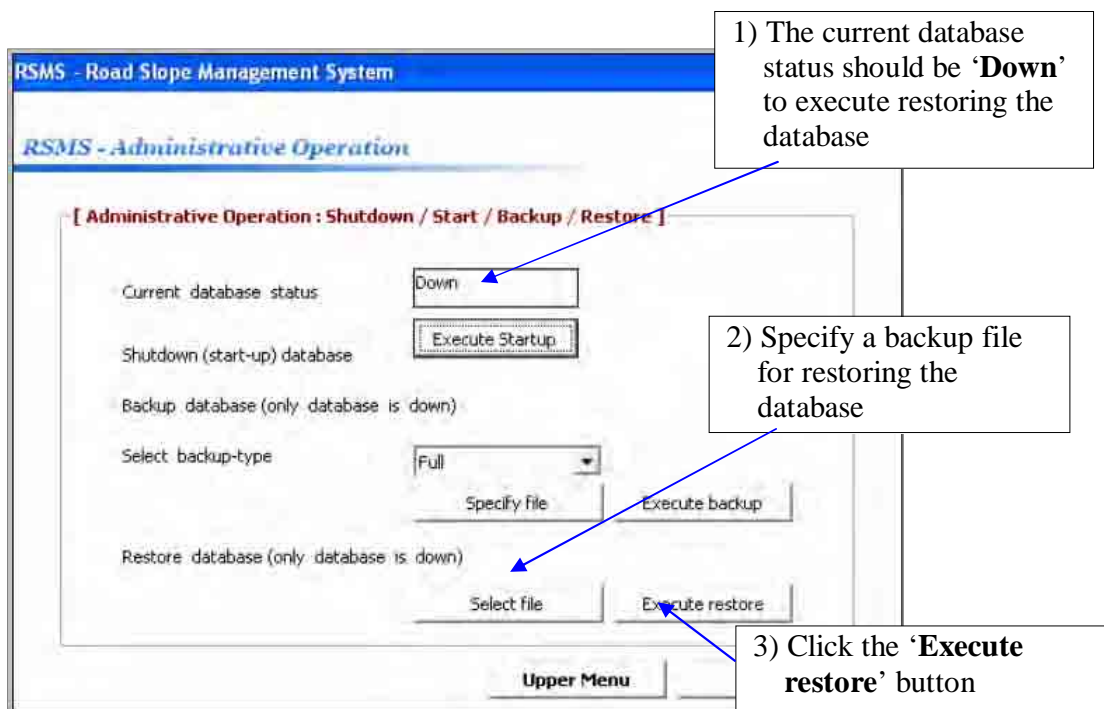


A full backup is a completed copy of the database at the time of executing the backup. On the other hand, an incremental backup stores only the changes from the previous backup. Therefore, from a full backup, the content of the database is restored up to the status when the full backup was taken. Furthermore, an incremental backup might have to be used in combination with a full backup to restore the content of the database completely.

3. Click the **Specify file** button to browse and enter the name of the backup file.
4. Click the **Execute Backup** button to backup the content of the database. After the backup is completed, a message will be displayed.

6.9 To Restore the Database (Application Support Administrators only)

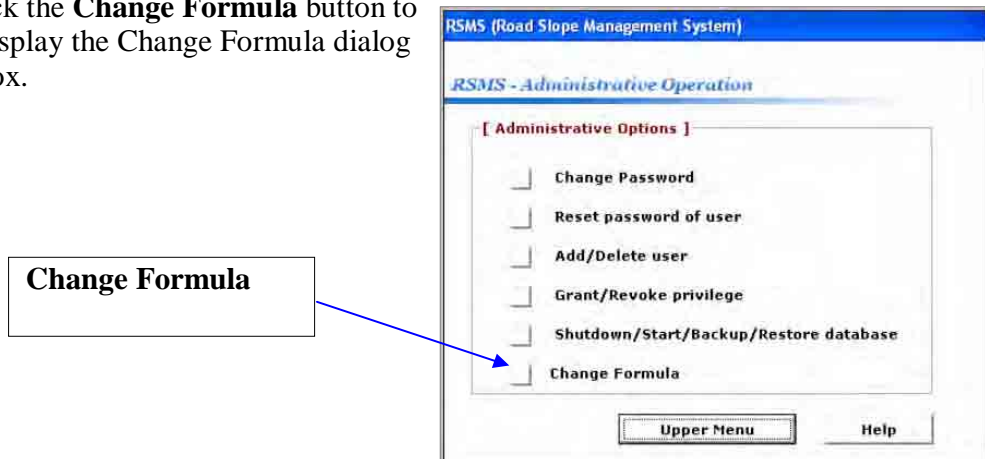
1. From the Administrative Operation window, click the **Start/Shutdown/Backup/Restore database** button to display the Start/Shutdown/Backup/Restore database dialog box.
2. In the Start/Shutdown/Backup/Restore database dialog box, click the **Execute Shutdown button** to shutdown the database management system if necessary. You can only restore database when the database management system is down.
3. Click the **Specify file** button to browse the backup file you want to restore.
4. Click the **Execute Restore** button to restore the database.



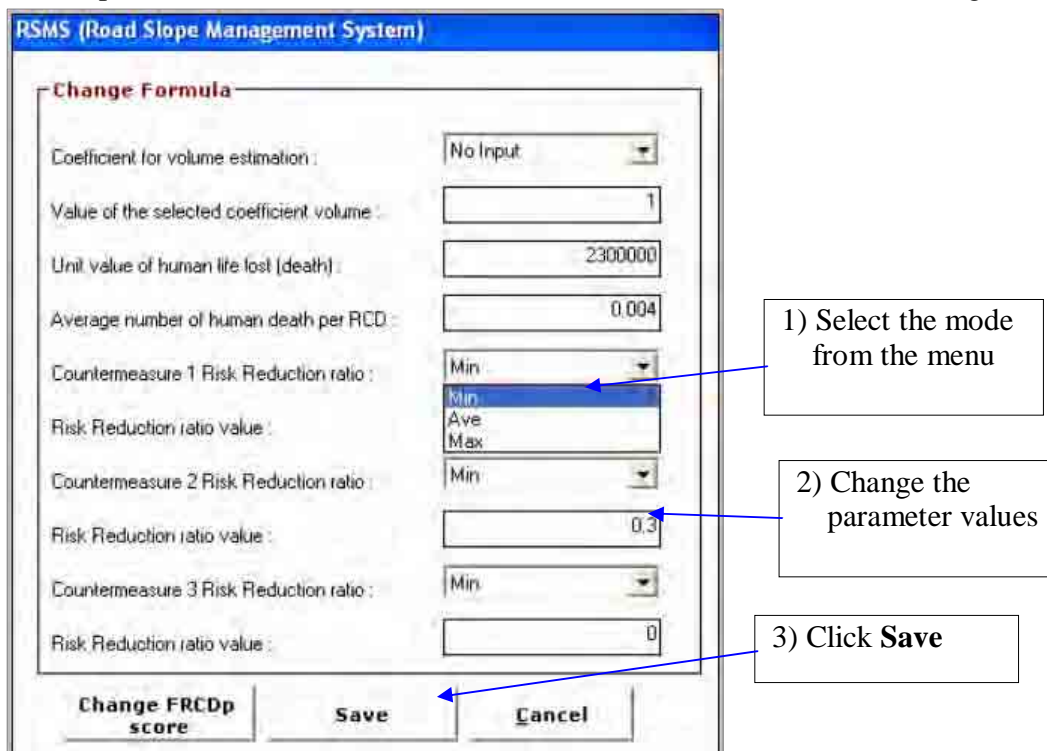
6.10 To Change Formula (Application Support Administrators only)

This is implemented in RSMS database application, so that the changes in the formula used to calculate IFA can be reflected in the application.

1. From the Administrative Operation window, click the **Change Formula** button to display the Change Formula dialog box.



3. In the Change Formula dialog box, you can change the values of the parameters and the mode (min, max, etc). Click **Save** to save the changes.



If you would like to change score values used in the FRCDp calculation, follow the procedure shown below.

1. Click the **Change FRCDp score** button in the Change Formula dialog box shown above. The Change FRCDp dialog box appears as shown below.
2. In the Change FRCDp dialog box, select the sheet for the disaster type, select the item from the menu, and modify the corresponding score value.
3. Click **Save**

1) Select the disaster type of your interest.

2) Select the item from the menu.

3) Change the score value

4) Click Save

Clicking the **Change constant value** button will bring you to the previous dialog box.

SECTION 7

HELP MODULE

This is used to provide the users with the online information on the system and will answer frequently asked questions.

To use the Help dialog box

1. From the **Main Menu** window, click the **Help** button to open its dialog box.
2. In the dialog box that appears, click on the tab of the help options you need to use.
3. Click on the topic and then click the **Display** button to display the information for that particular topic.
4. Click this **Hide** icon to show/hide the tabs for the RSMS help.

Appendix-6

Road Slope Management System (RSMS)

Manual Volume 2

INSTALLATION MANUAL (Server)

Ver1.1 June 2007

The Department of Public Works and Highways

Notice

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RSMS

RSMS (Road Slope Management System) is an application software program, which was developed in the Study named “The Study on Risk Management for Sediment-related Disaster on Selected National Highways in The Republic of The Philippines. This Study was undertaken by the Japan International Cooperation Agency (JICA) Study Team, the The Department of Public Works and Highways (DPWH) Counterpart Team, in cooperation with DPWH and JICA Philippine Office.

SECTION 1 INTRODUCTION

This section provides the application support administrator with an overview of the installation of the Road Slope Management System (RSMS) into a server PC.

SECTION 2 REQUIREMENTS

Hardware

- + CPU Pentium IV 2.4G or equivalent
- + CD-R drive (for software installation)
- + 2 GB RAM
- +100 GB disk space

Software

- +MS Windows Server2003 should be installed in advance
- +MS-Office 2003 (Word, Excel) should be installed

SECTION 3

INSTALLATION PROCEDURE (Server)

Notice: The installation procedure should be performed by an administrator of the Server PC.

I. Set up network parameters to connect to LAN

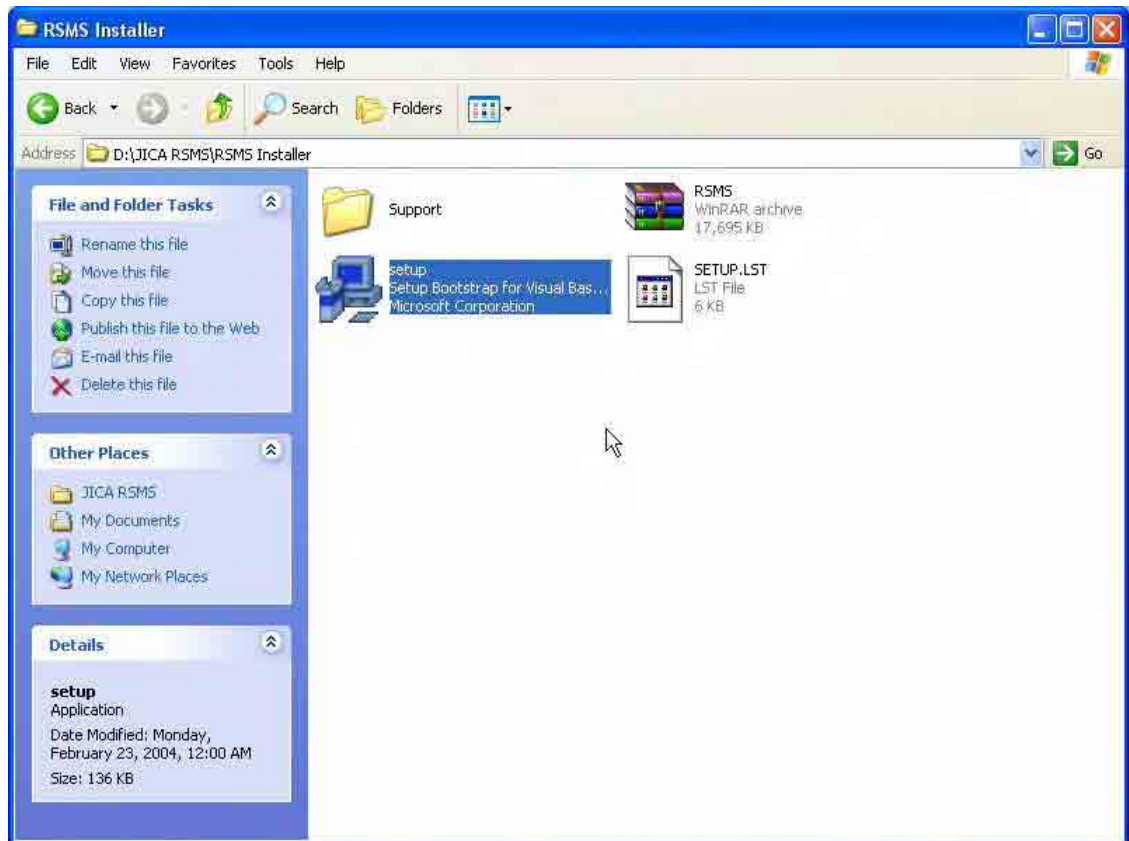
II. Install Microsoft SQL Server 2005

1. Disconnect each server from any external network by unplugging all cables or disabling all network adapters.
2. Verify that the server in which you intend to install SQL Server 2005 is turned on.
3. Insert the **SQL Server 2005 Standard Edition CD** into the CD drive.
4. If the **Microsoft SQL Server 2005 Standard Edition** splash screen does not appear, run the **splash.hta** file from the product CD.
5. On the **End User License Agreement** page, accept the terms of the license, and then click **Next**.
6. On the **Installing Prerequisites** page, click **Install**. SQL Server 2005 Setup installs the required software components.
7. On the **Installing Prerequisites** page, click **Next**.
8. On the **Welcome to the Microsoft SQL Server Installation Wizard** page, click **Next**.
9. On the **System Configuration Check** page, click **Next**.
10. On the **Registration Information** page, enter information in the **Name** and **Company** boxes. To continue, click **Next**.
11. On the **Components to Install** page, select the following options:
Select a production database server, select:
 - ✓ SQL Server Database Services
 - ✓ Notification Services
 - ✓ Integration Services
 - ✓ Workstation Components, Books Online and development tools
12. Click **Next**.
13. On the **Instance Name** page, select **Default instance**, and then click **Next**.
On the **Service Account** page, select **Use the built-in System account**.
14. In the Start services at the end of setup section, select all the check boxes, and then click **Next**.
15. On the **Authentication Mode** page, select **Windows Authentication Mode**, and then click **Next**.
16. On the **Collation Settings** page, select **SQL collations**, and then click **Next**.
17. On the **Report Server Installation Options** page, select **Install the default configuration**, and then click **Next**.
18. On the **Error and Usage Report Settings** page, select both check boxes, and then click **Next**.
19. On the **Ready to Install** page, click **Install**.
20. On the **Setup Progress** page, click **Next**.
21. On the **Completing Microsoft SQL Server 2005 Setup** page, click **Finish**.

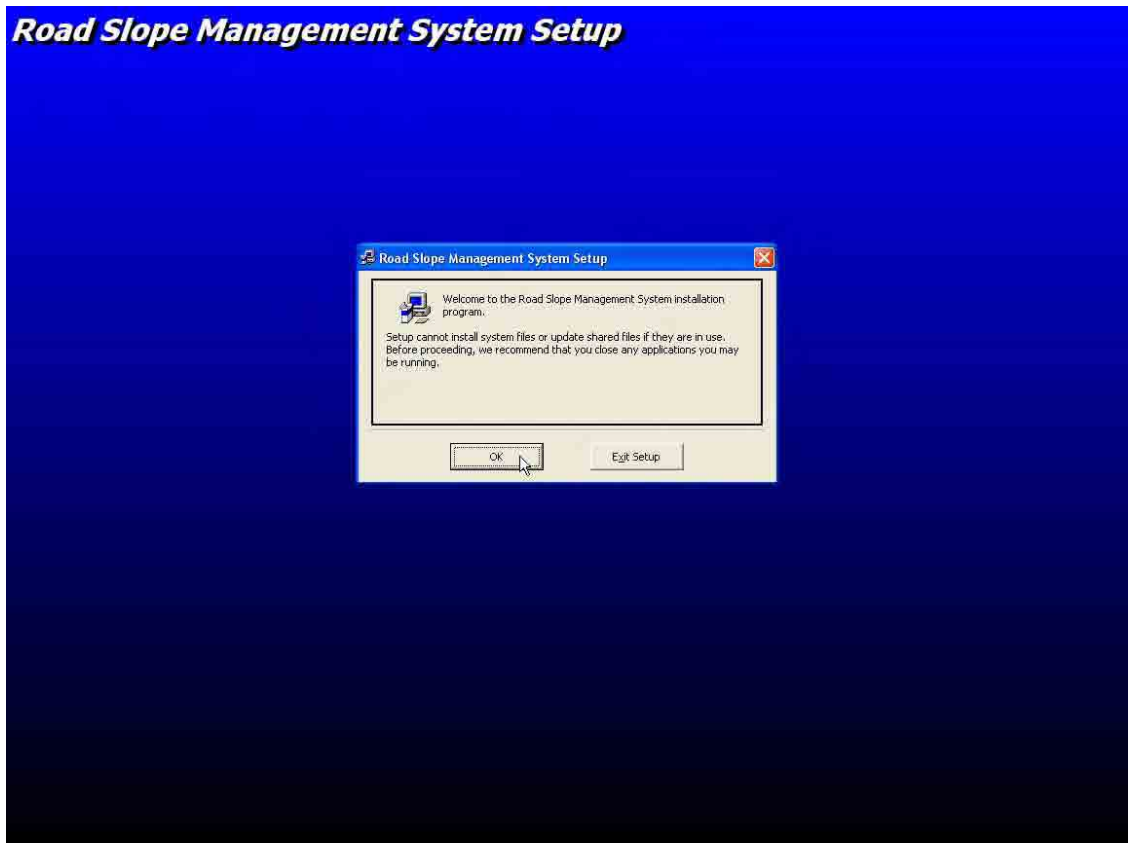
III. Create user accounts to allow users to connect to the SQL Server.

IV. Install the Road Slope Management System (RSMS) application.

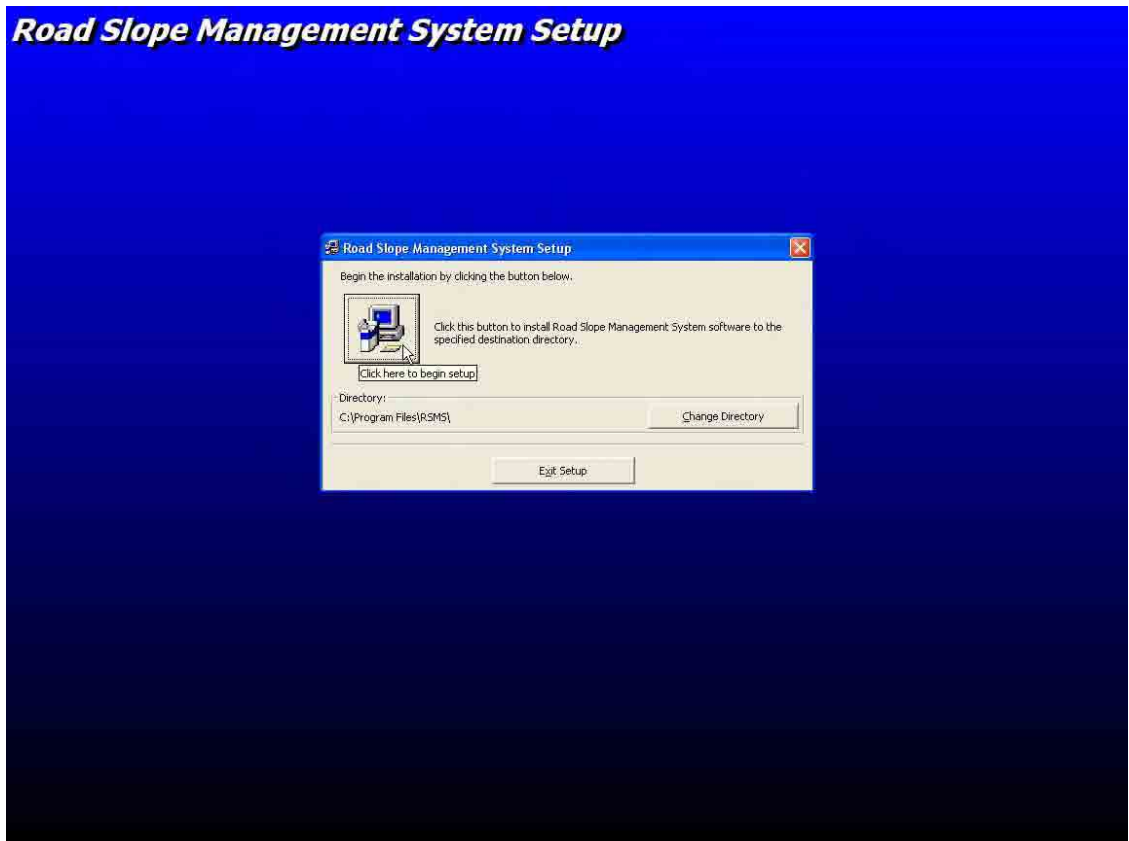
1. Insert the **Road Slope Management System (RSMS) Installer CD** into the CD drive and run the **Setup**.



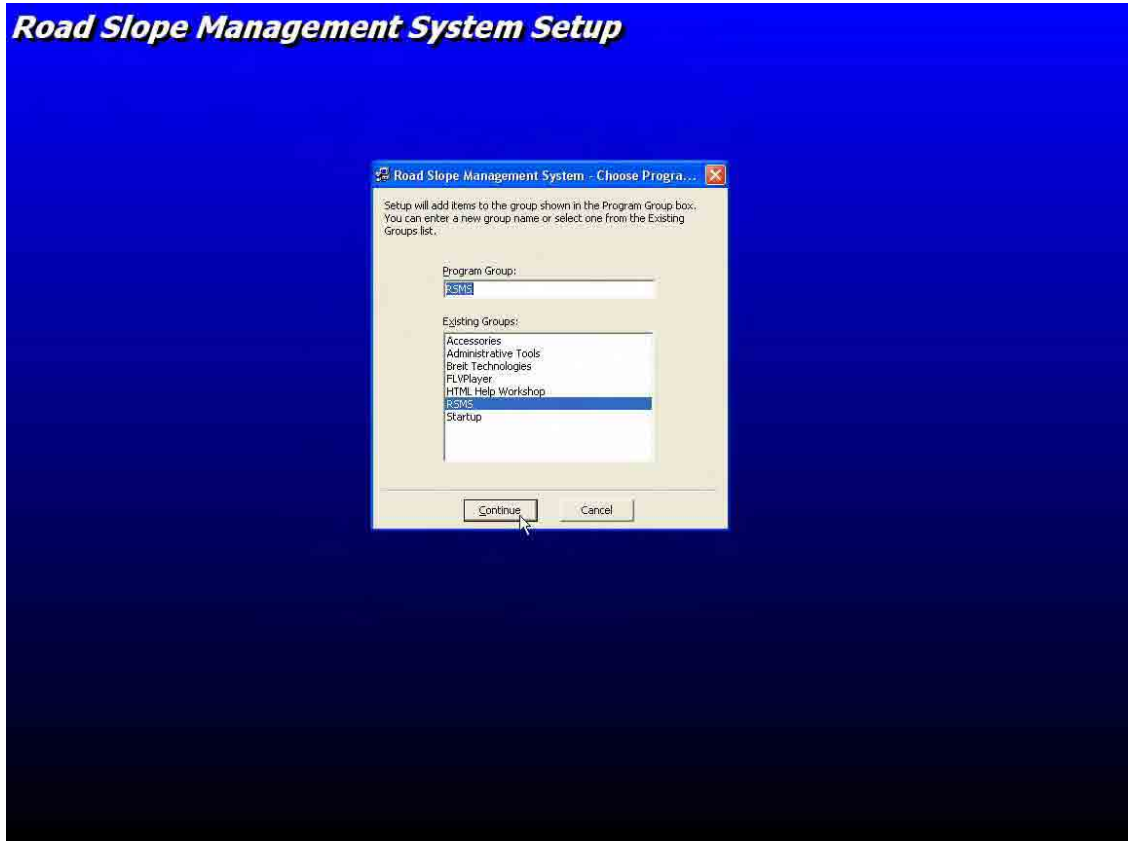
2. On the **Welcome to the Road Slope Management System installation program** page, click OK.



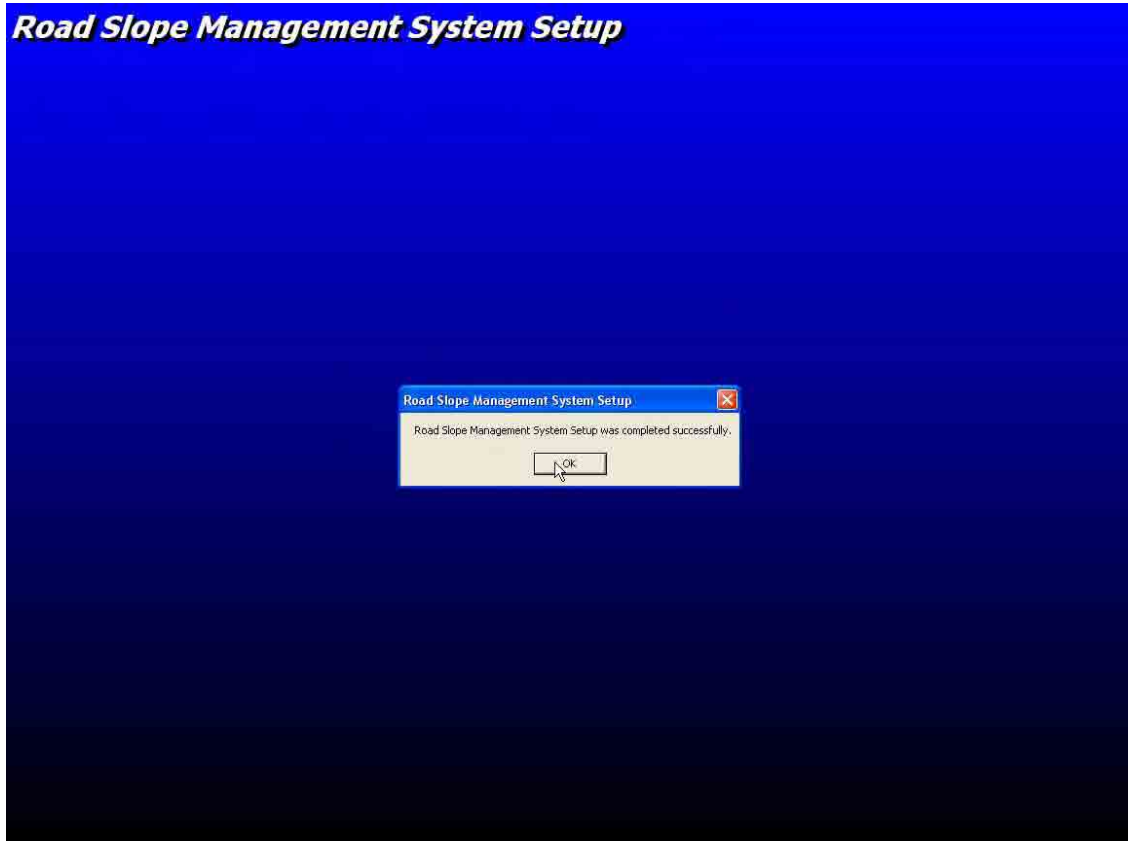
3. On the **Begin the installation by clicking the button below** page, click the **button with a computer icon**.



4. On the **Road Slope Management System – Choose program** page, click **Continue**.



5. After the installation is finished, click **OK**.



V. Create the Road Slope Management System (RSMS) ODBC

1. Click **Start Menu** and select **Control Panel**.



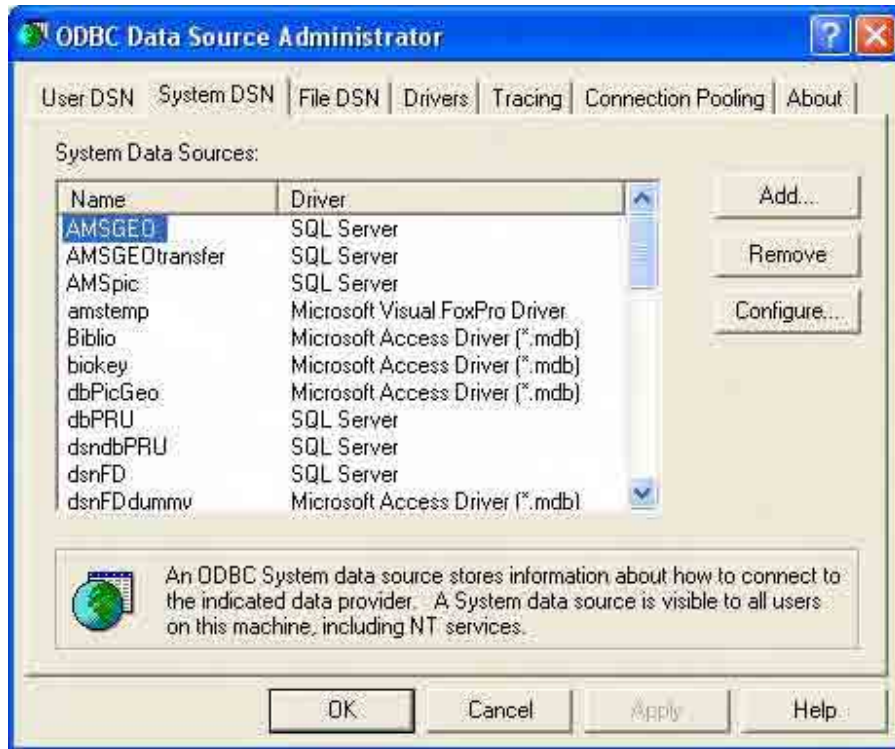
2. On the **Control Panel** window, double-click **Administrative Tools**.



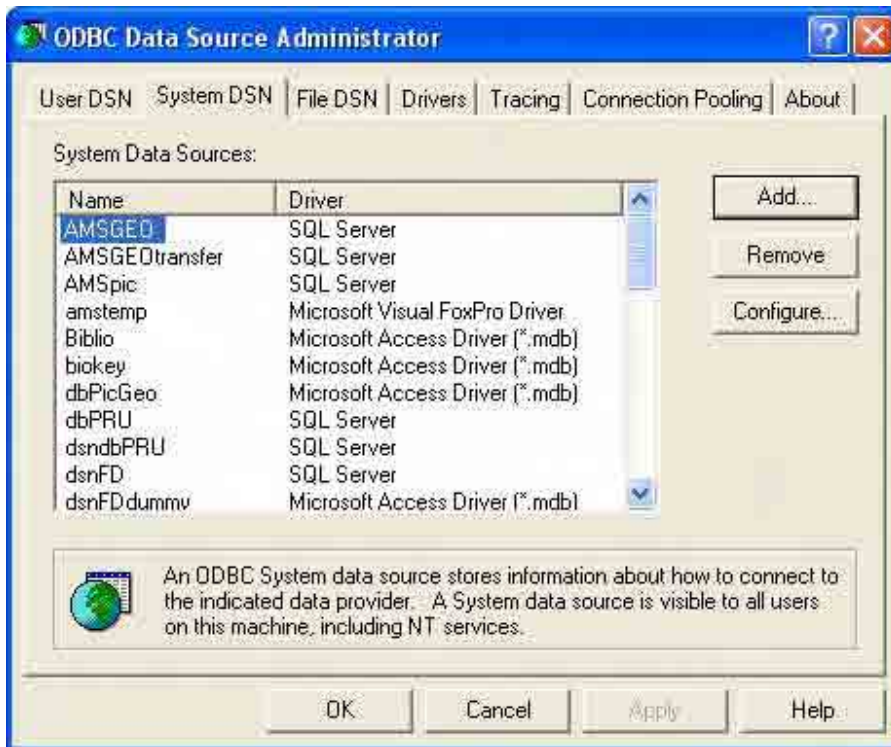
3. On the **Administrative Tools** window, double-click **Data Sources (ODBC)**.



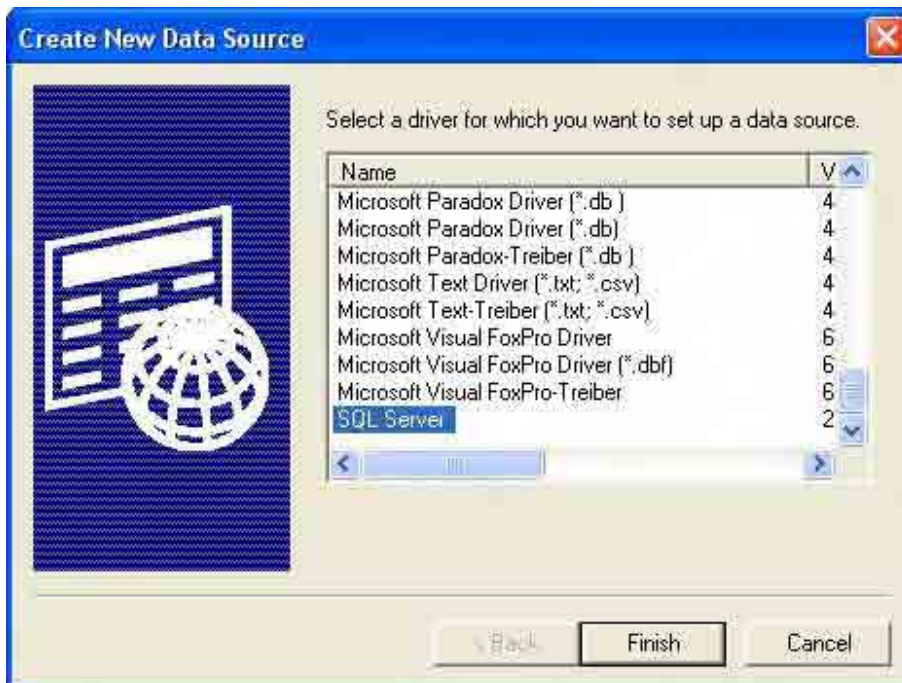
4. On the **Data Sources (ODBC)** dialog box, click **System DSN** tab.



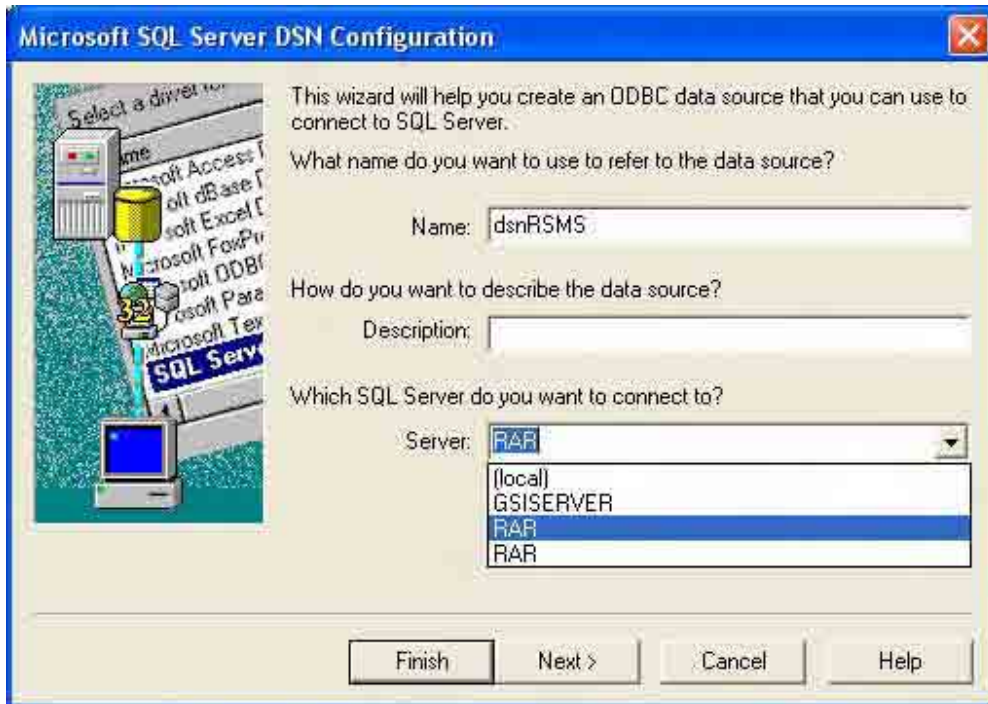
5. Under the **System DSN** tab, click **Add**.



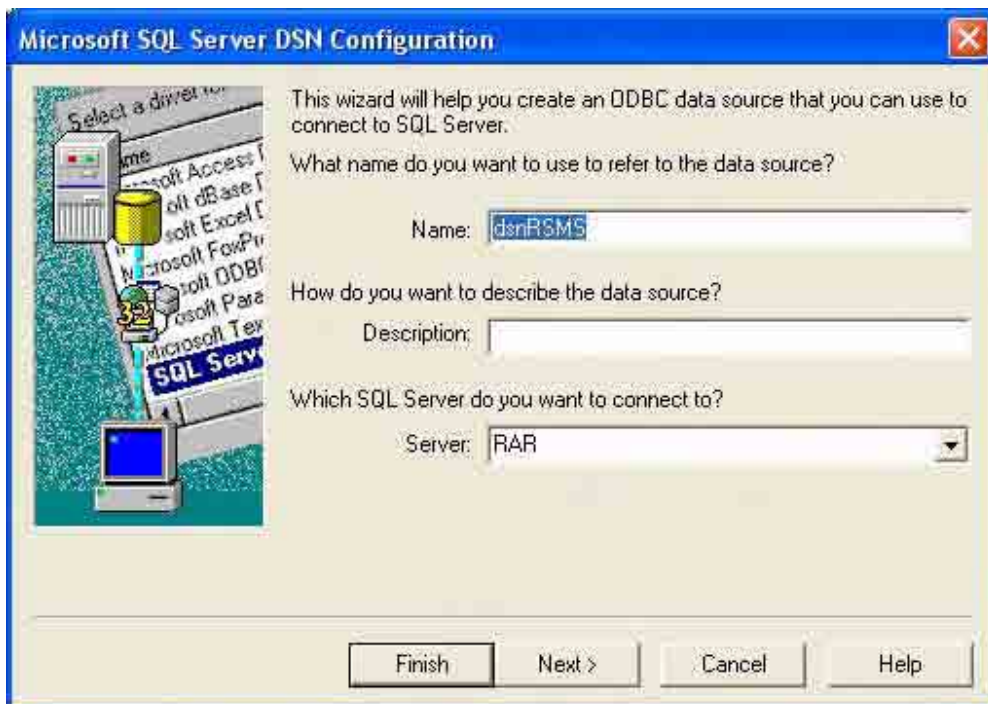
- On the **Create New Data Source** dialog box, select **SQL Server** and then click **Finish**.



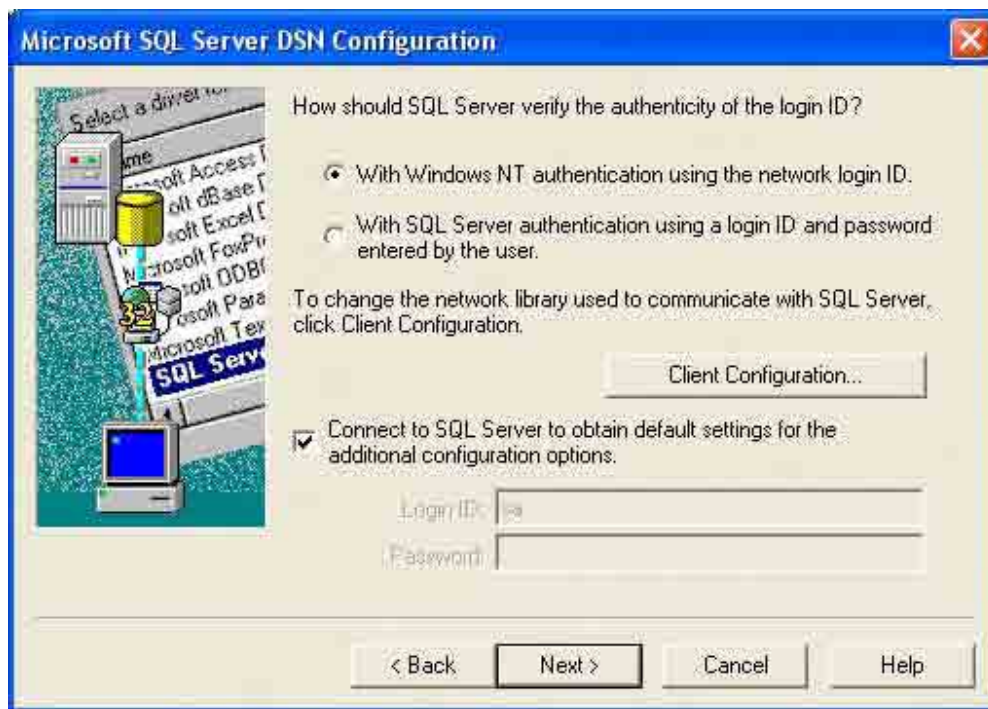
7. On the **Create a New Data Source to SQL Server** dialog box, enter the following:
Name: dsnRSMS
Server: (Select the server where the RSMS Server is running.)



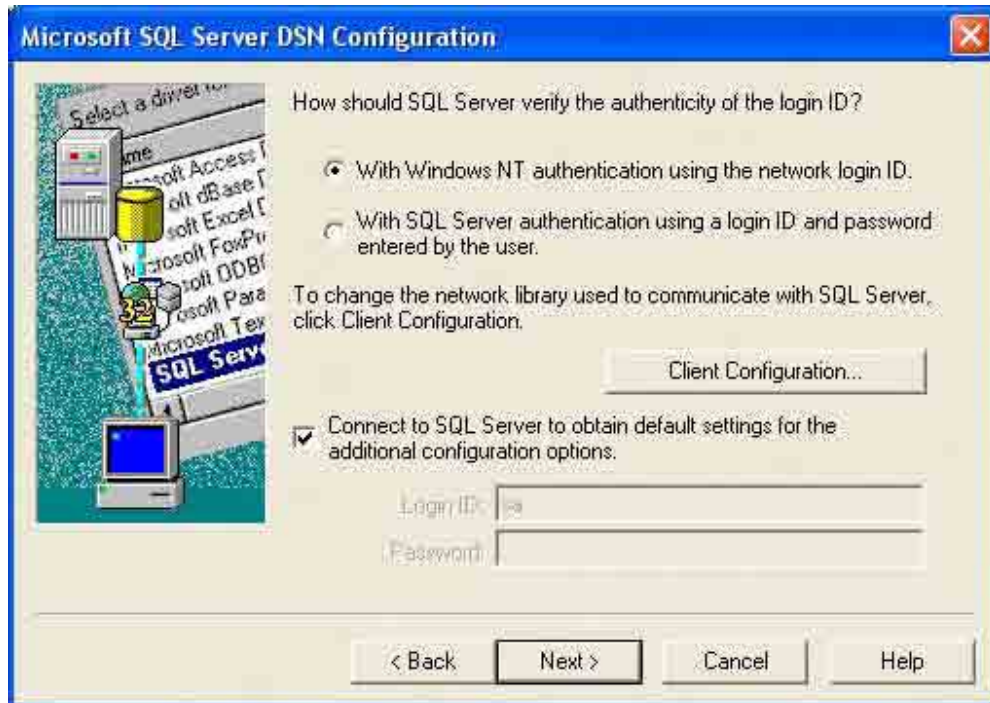
8. Click **Next**.



9. On the **SQL Server Authenticity** page, select **With Windows NT authentication using the Network login ID** and check the **Connect to SQL Server to obtain default settings for the additional configuration options**.



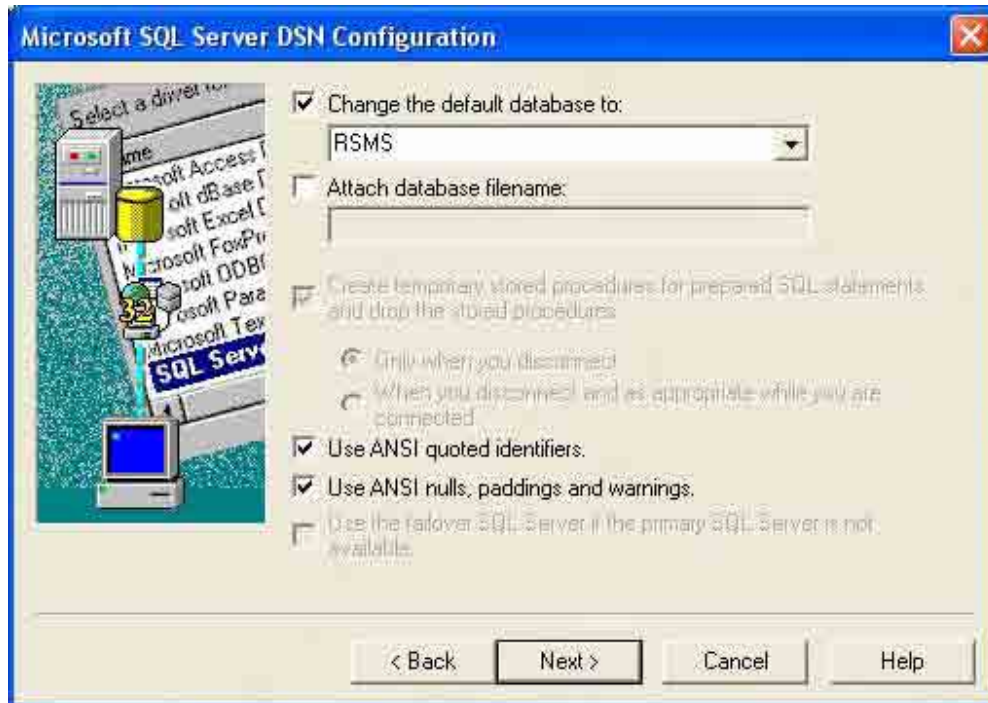
10. Click **Next**.



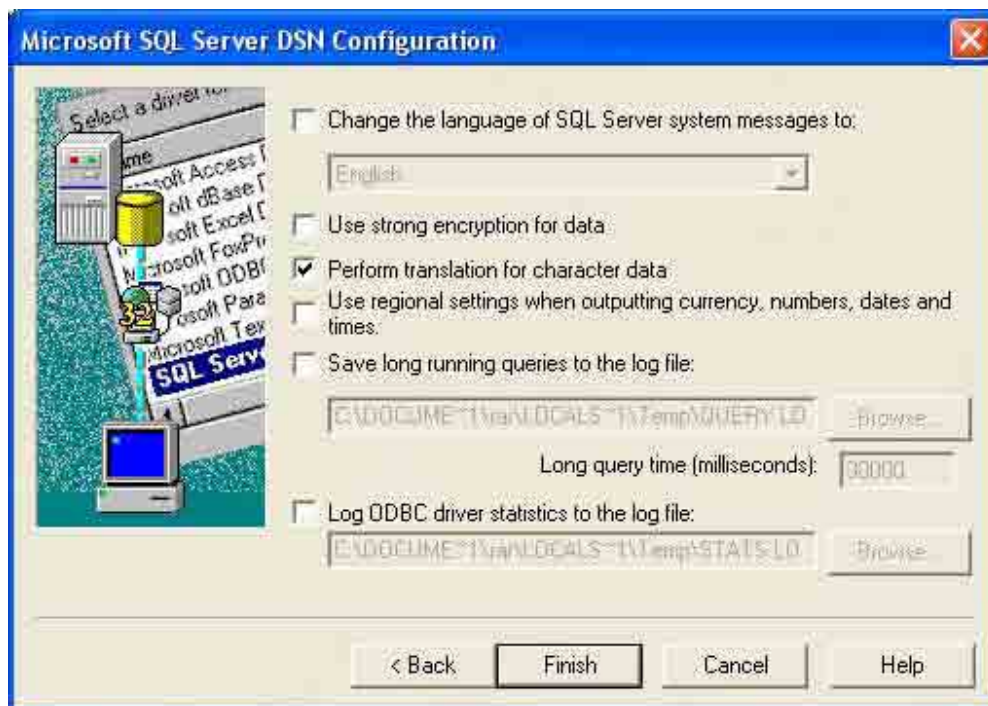
11. Check **Change the default database to**, and select **RSMS** on the dropdown list.



12. Click **Next**.



13. Then click **Finish**.



14. On the **ODBC Microsoft SQL Server Setup** page, click **Test Data Source** to check if the connection is successful.



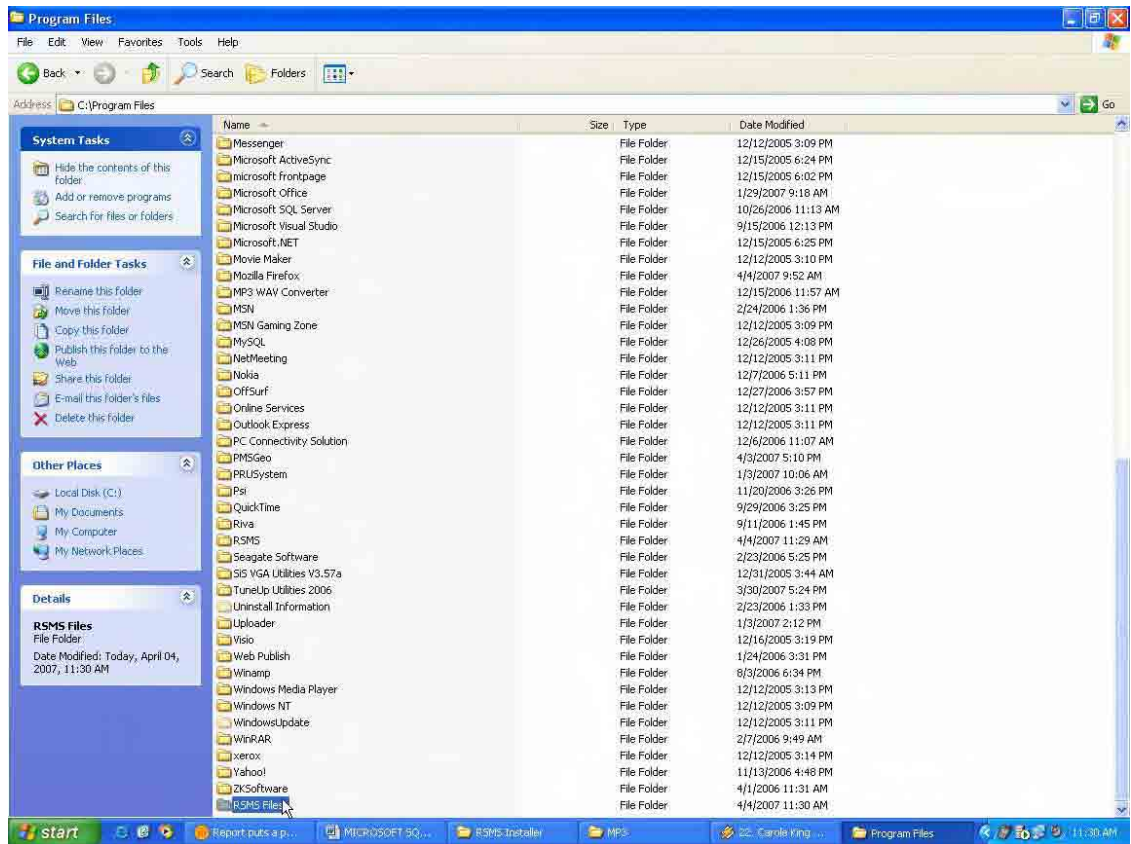
15. If the connection is successful, click **OK**.



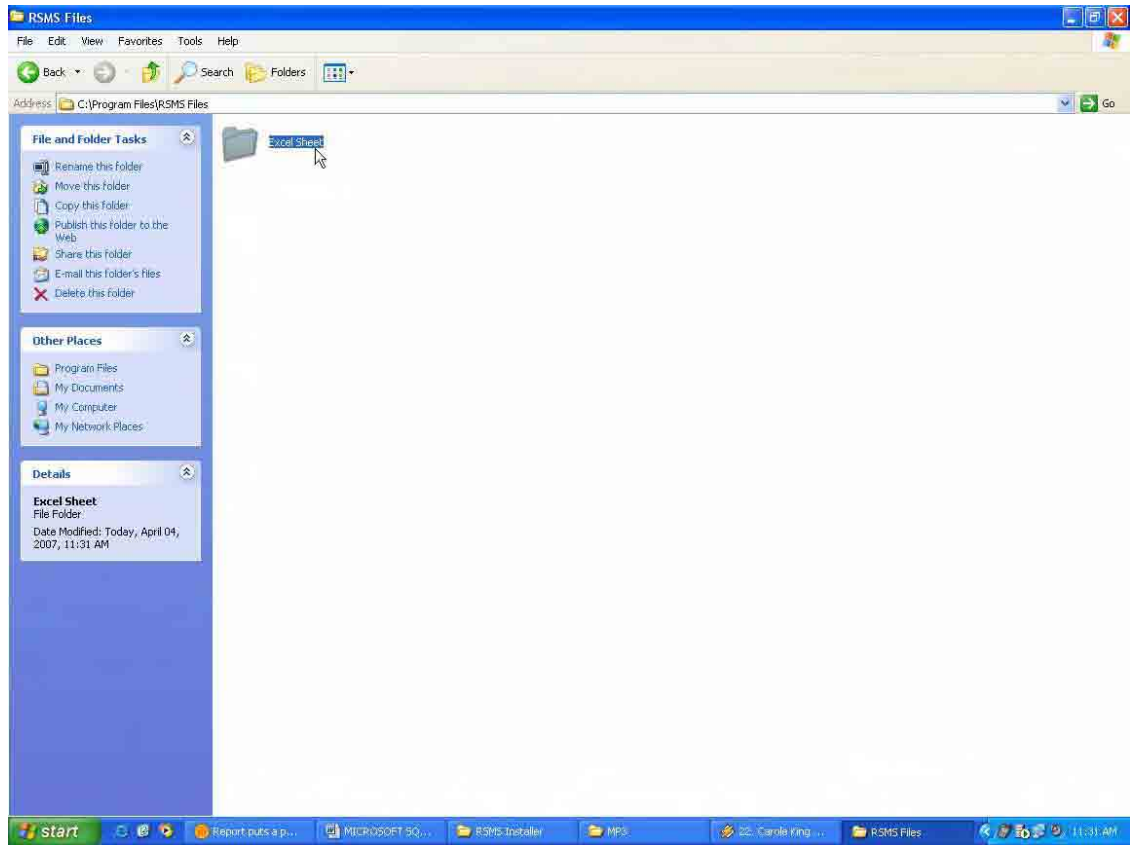
16. Then click **OK**.

VI. Create a folder to store the RSMS Survey Sheets

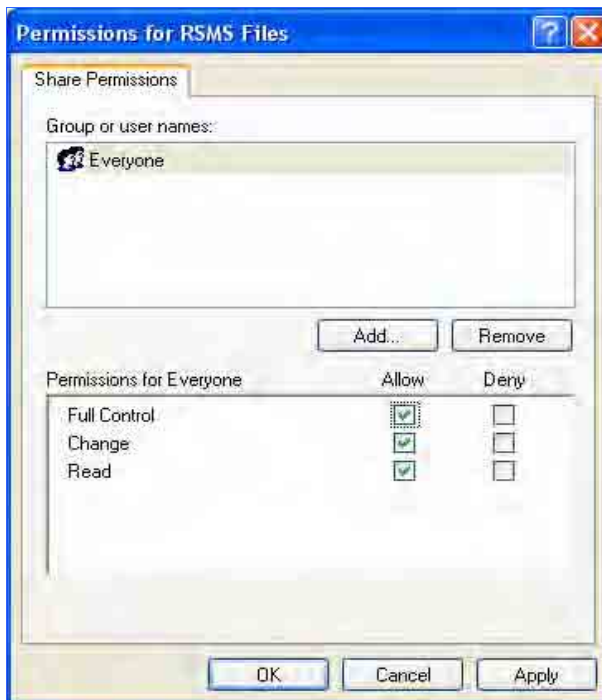
1. Create a folder in **C:\Program Files** directory and name it **RSMS Files**.



2. Inside the folder **RSMS Files** create another folder and name it **Excel Sheet**.

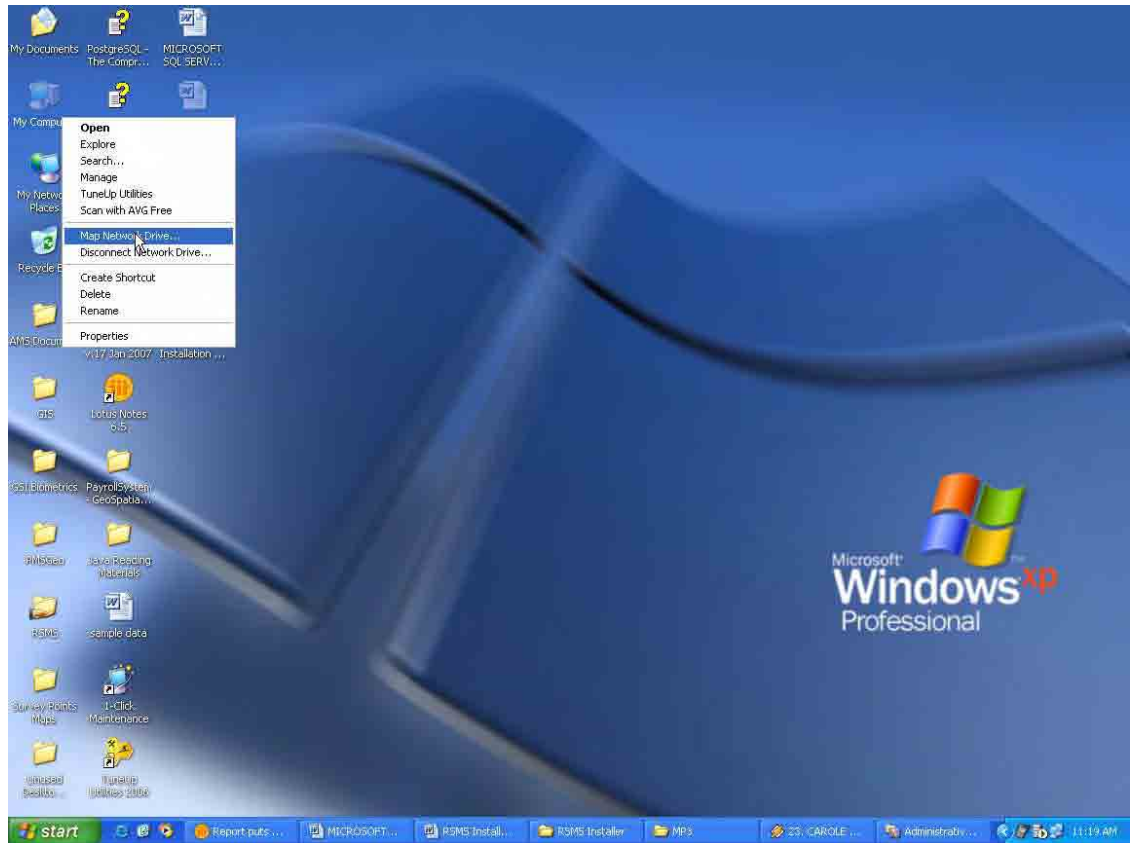


3. Share the **RSMS Files** folder and set the permission to **Allow Full Control for Everyone**.

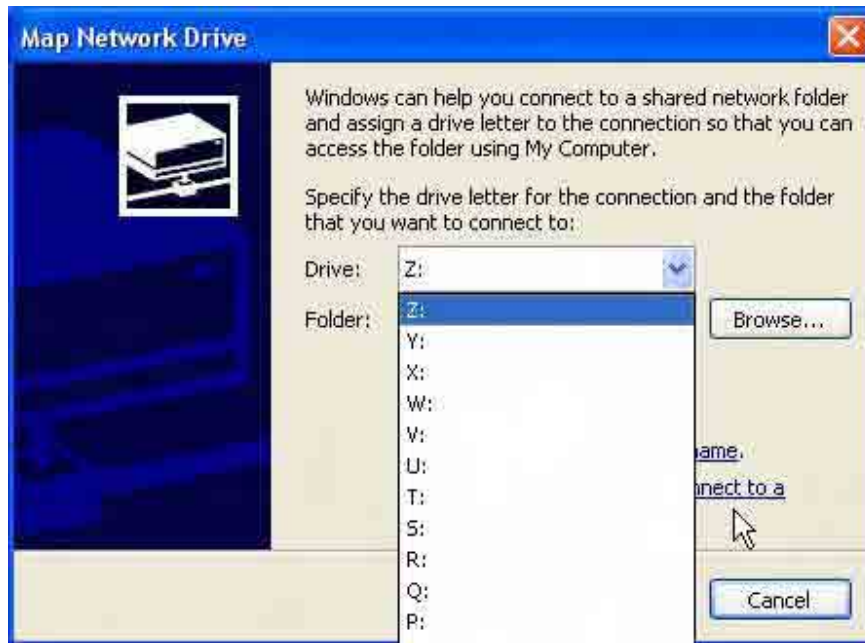


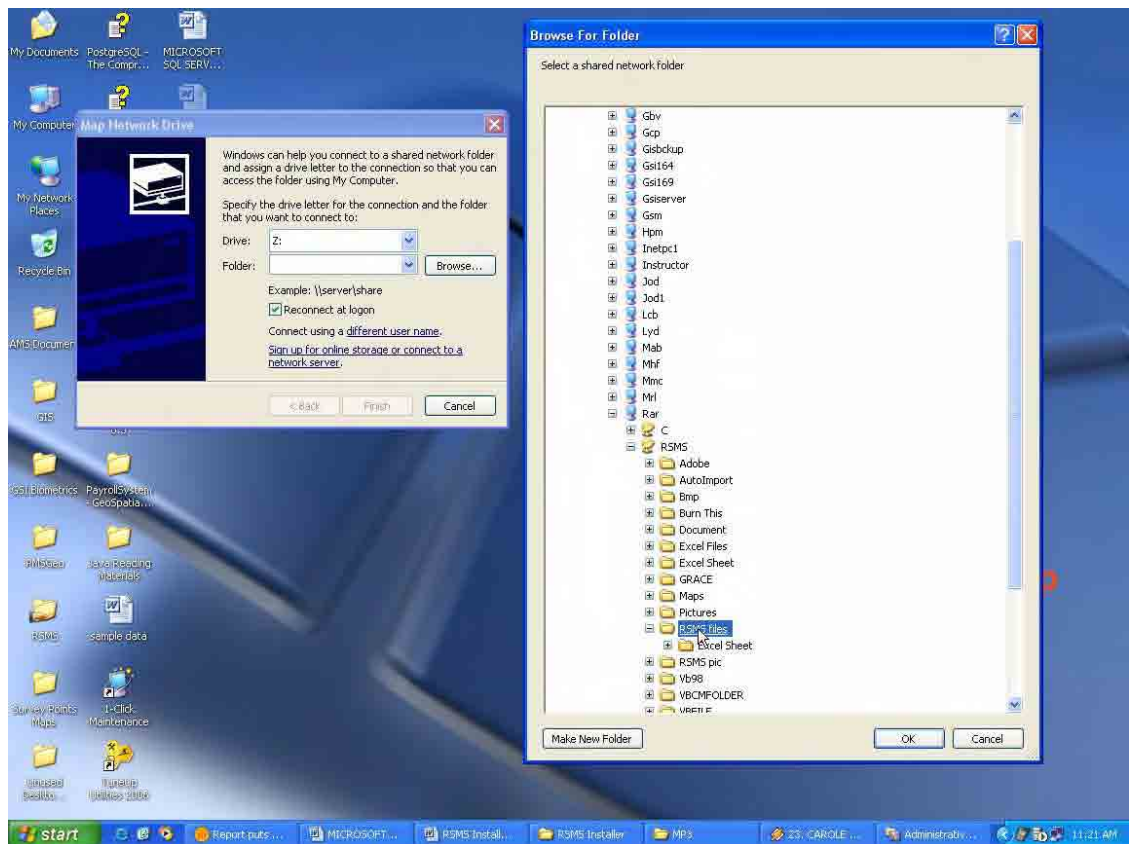
VII. Create a Network Drive

1. Right-click **My Computer** and select **Map Network Drive**.



2. On the **Map Network Drive** dialog box, select Z: as the drive then click **Browse** to browse to the RSMS Server and select the **RSMS Files**.





3. Click **OK**.
4. Then click **Finish**.



Appendix-7

**Road Slope Management System
(RSMS)**

Manual Volume 3

**INSTALLATION MANUAL
(Client)**

Ver1.1 June 2007

The Department of Public Works and Highways

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In this manual, ©, ® or TM is not used. **RSMS**

RSMS (Road Slope Management System) is an application software program, which was developed in the Study named “The Study on Risk Management for Sediment-related Disaster on Selected National Highways in The Republic of The Philippines. This Study was undertaken by the Japan International Cooperation Agency (JICA) Study Team, and the Department of Public Works and Highways (DPWH) Counterpart Team, in cooperation with the DPWH and the JICA Philippine Office.

SECTION 1 INTRODUCTION

This section provides the application support administrator with an overview of the installation of the Road Slope Management System (RSMS) into a client PC.

SECTION 2 REQUIREMENTS

Hardware

- + CPU Pentium III 1.0G or equivalent
- + CD-R drive (for software installation)
- + 256KB RAM
- + 60MB disk space

Software

- +MS Windows XP SP2
- +MS-Office 2003 (Excel).

Other requirements

- +RSMS should be already installed in the server.
- +Network connection with the sever should be available

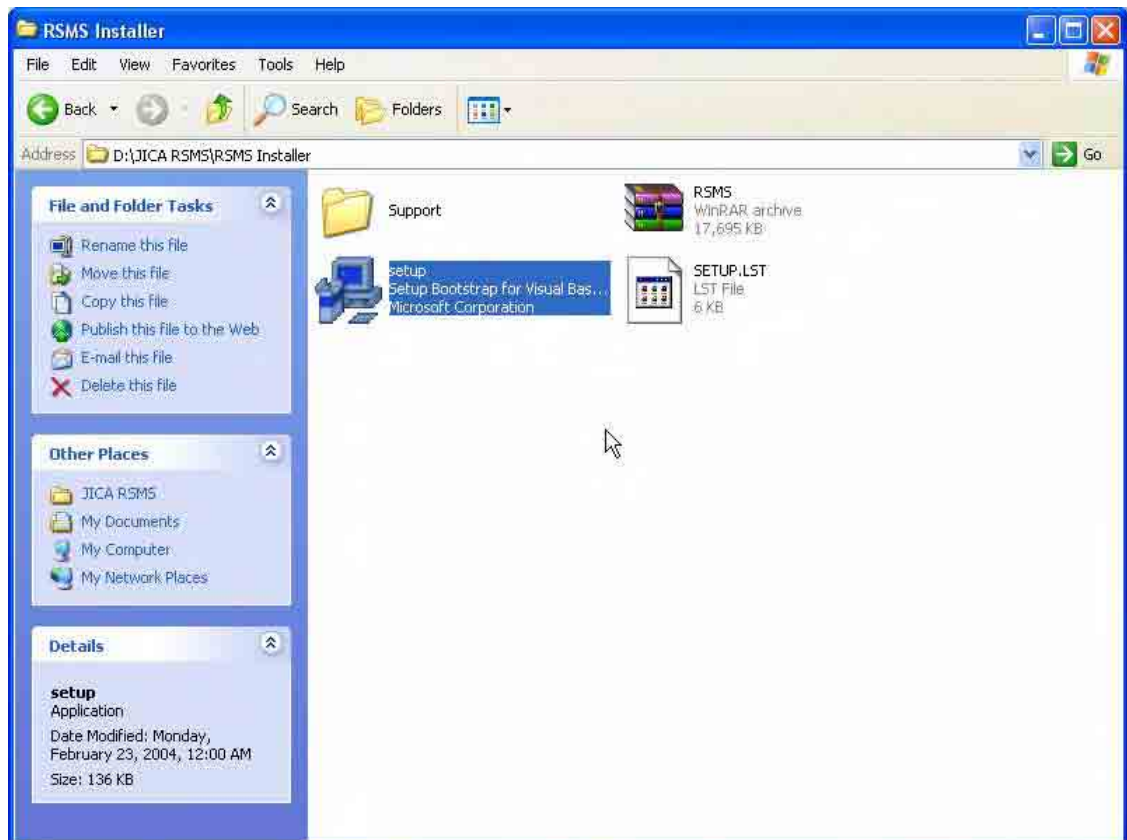
Note

+Installation should be performed on each client PC by user with administrative privileges.

SECTION 3 INSTALLATION PROCEDURE

Installing the Road Slope Management System (RSMS) application.

1. Insert the **Road Slope Management System (RSMS) Installer CD** into the CD drive and run the **Setup**.



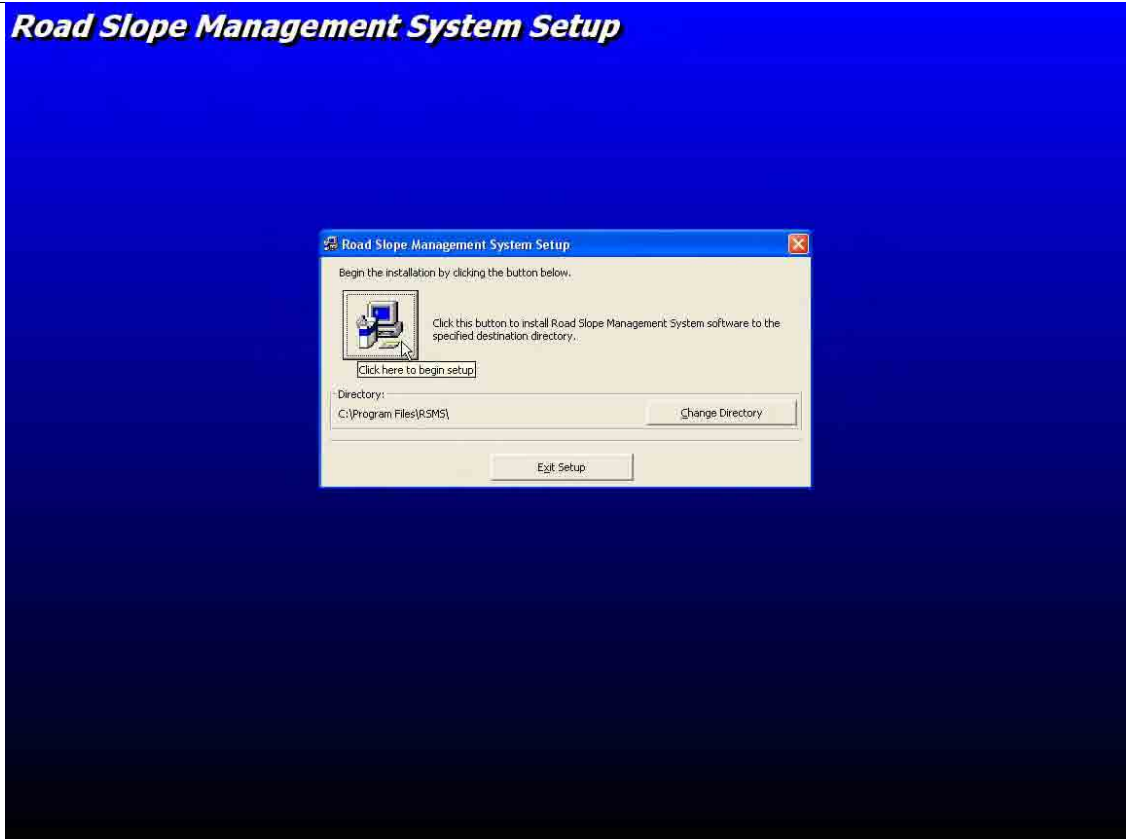
2. On the **Welcome to the Road Slope Management System installation program** page, click **OK**.

Road Slope Management System Setup



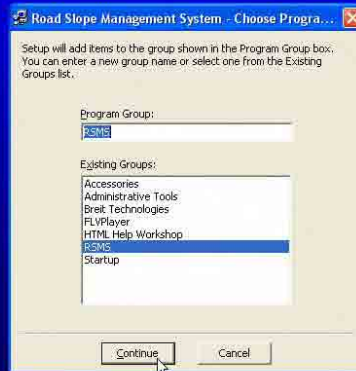
3. On the **Begin the installation by clicking the button below** page, click the **button with a computer icon**.

Road Slope Management System Setup



4. On the **Road Slope Management System – Choose program** page, click **Continue**.

Road Slope Management System Setup



5. After the installation is finished, click **OK**.

Road Slope Management System Setup



Creating the Road Slope Management System (RSMS) ODBC

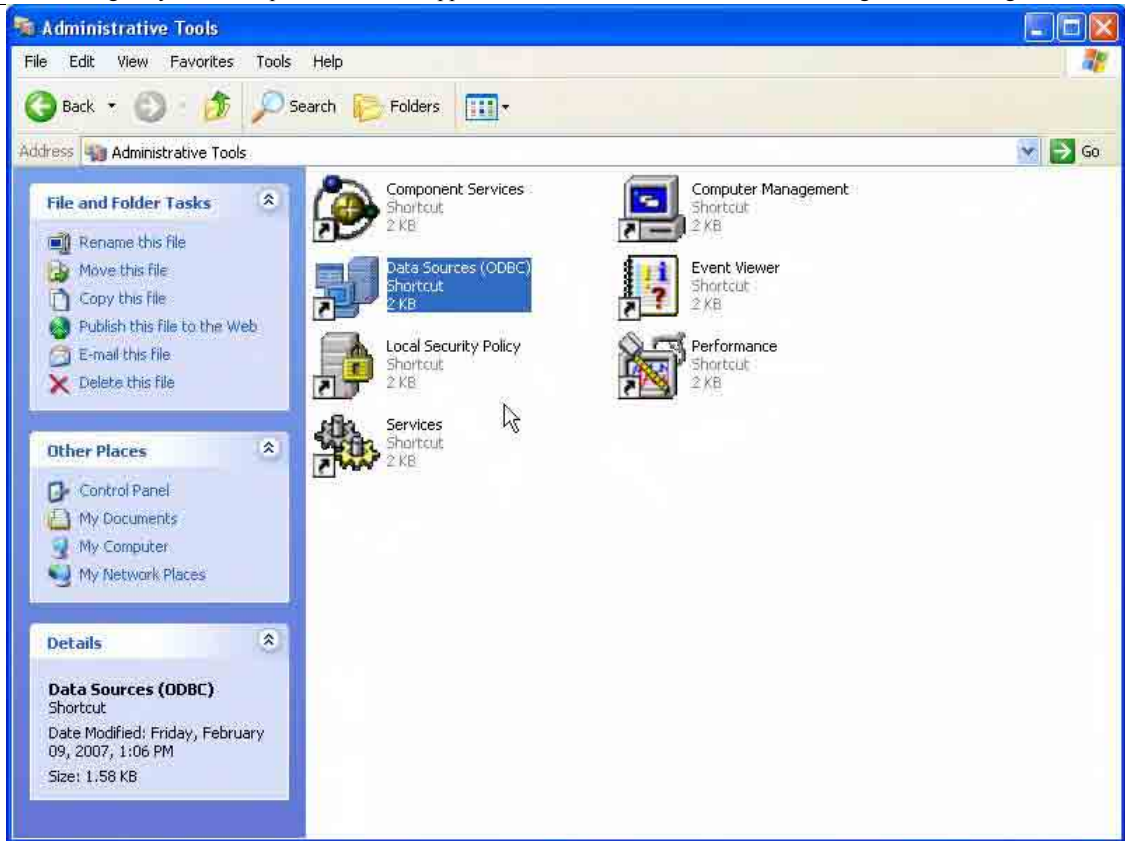
1. Click **Start Menu** and select **Control Panel**.



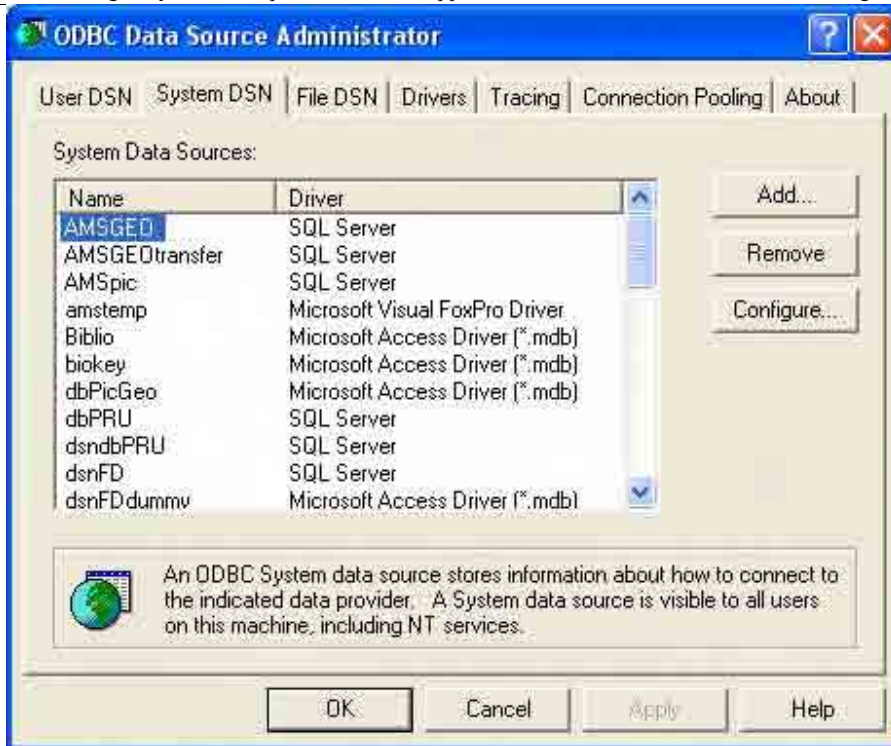
2. On the **Control Panel** window, double-click **Administrative Tools**.



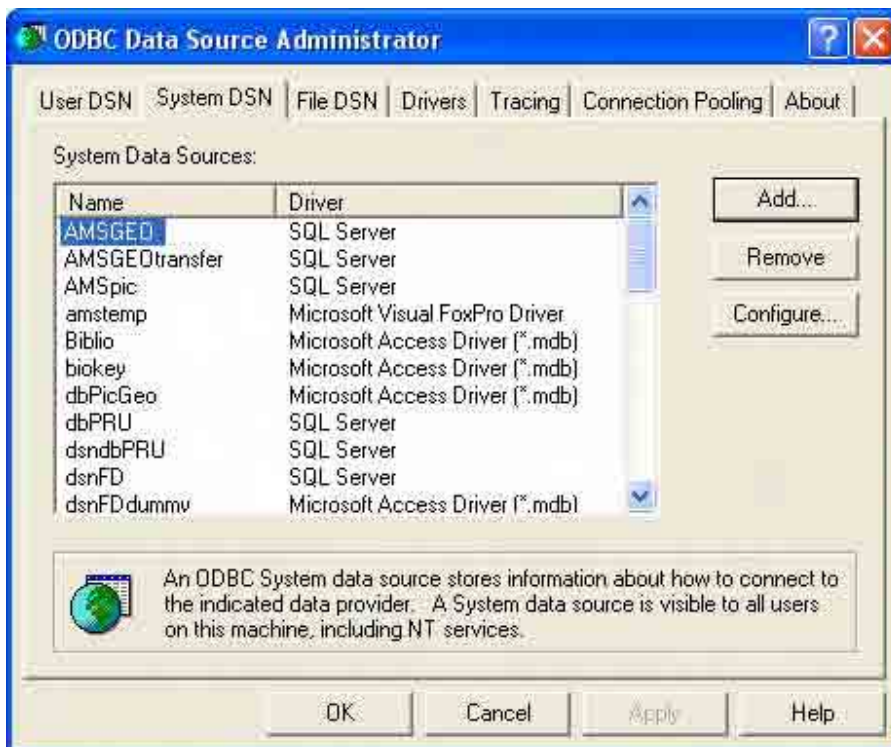
3. On the **Administrative Tools** window, double-click **Data Sources (ODBC)**.



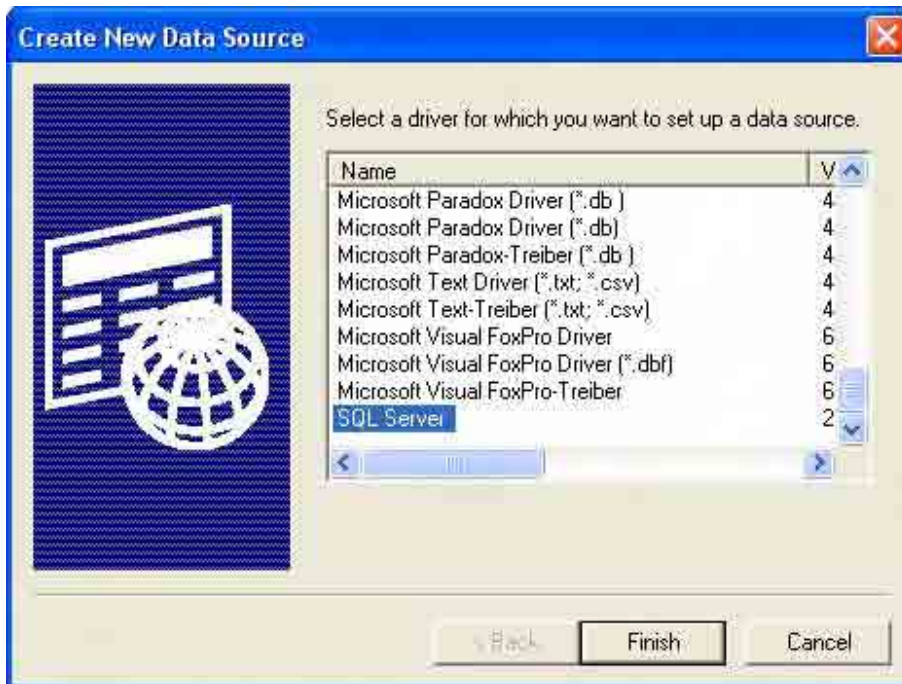
4. On the **Data Sources (ODBC)** dialog box, click **System DSN** tab.



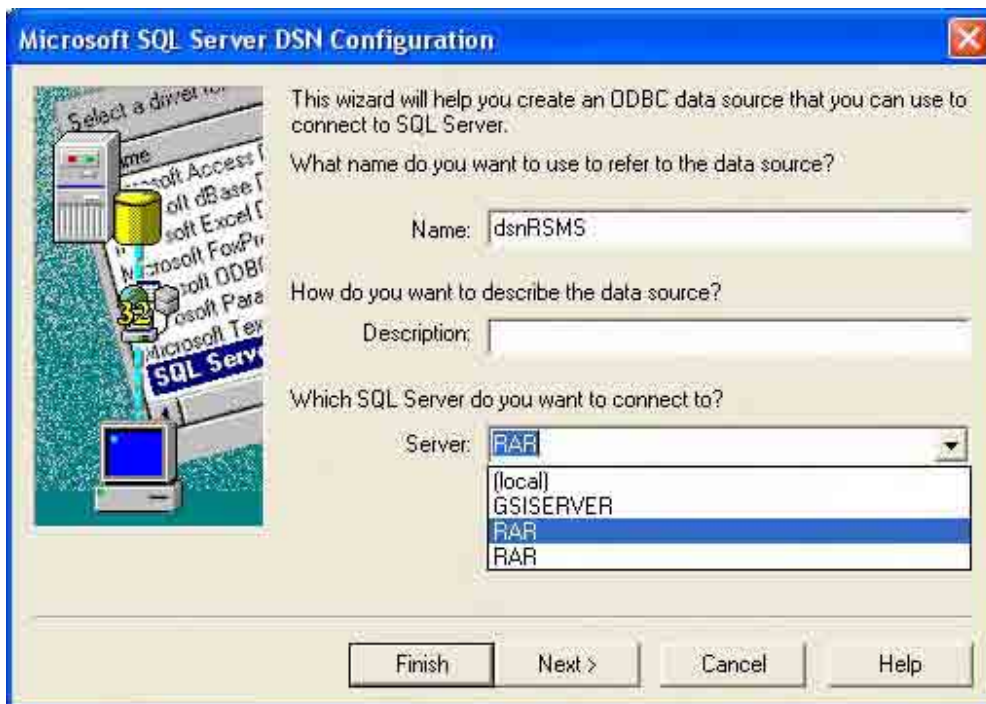
5. Under the **System DSN** tab, click **Add**.



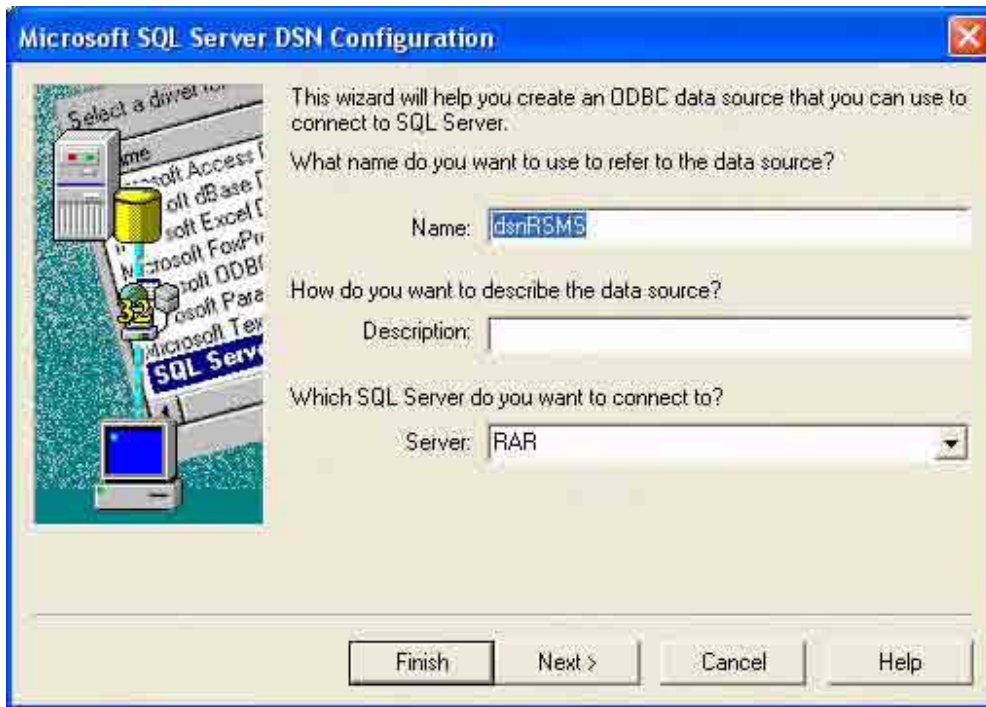
6. On the **Create New Data Source** dialog box, select **SQL Server** and then click **Finish**.



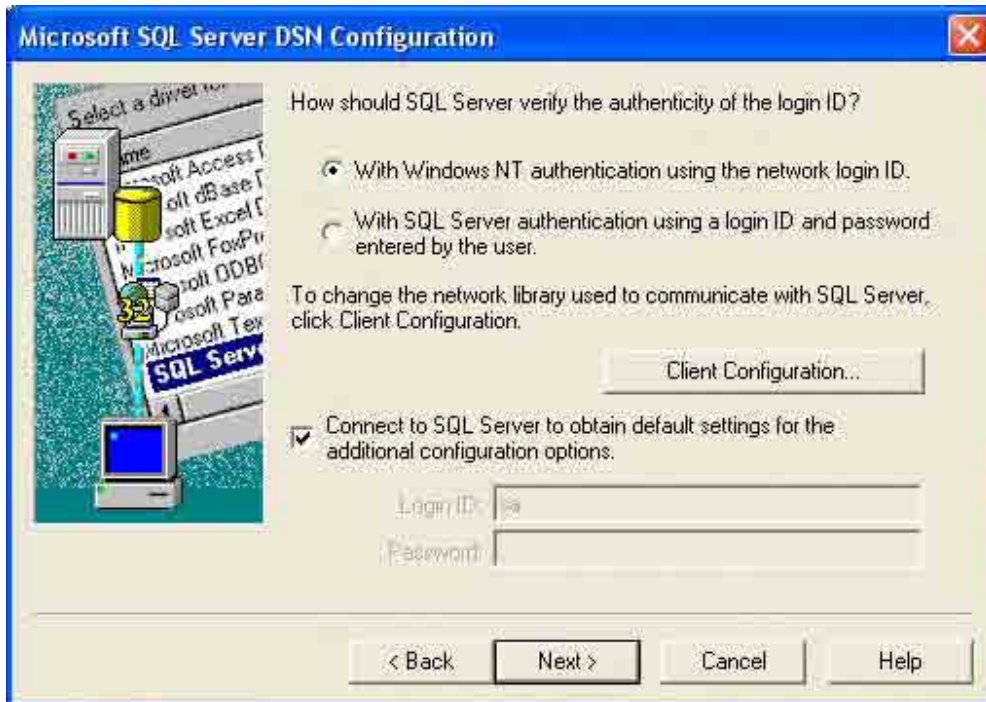
7. On the **Create a New Data Source to SQL Server** dialog box, enter the following:
Name: dsnRSMS
Server: (Select the server where the RSMS Server is running.)



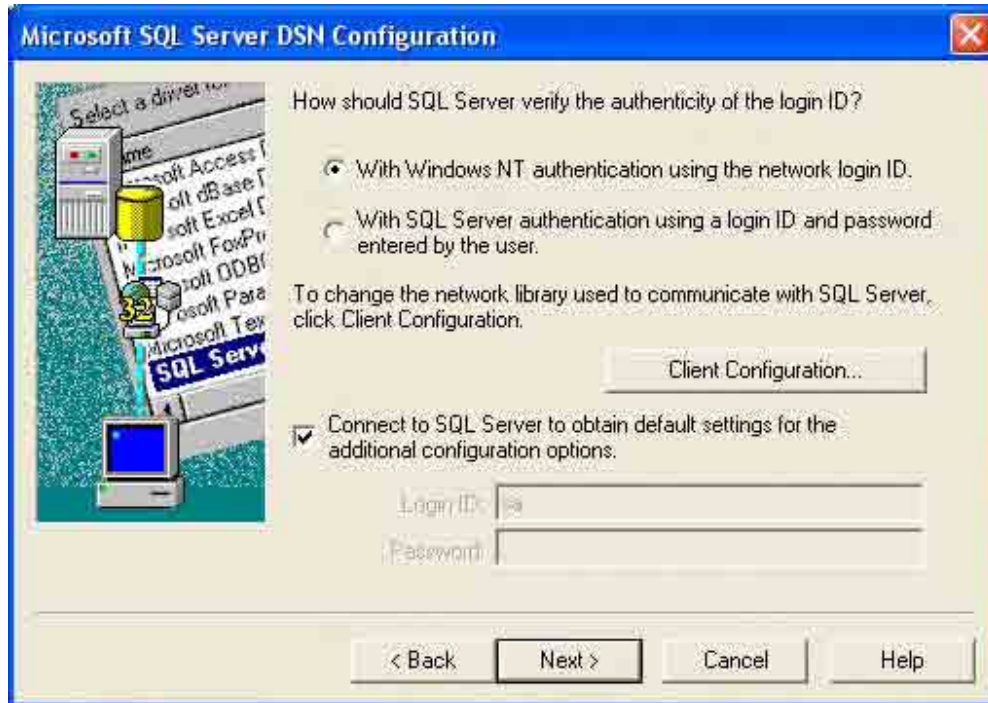
8. Click Next.



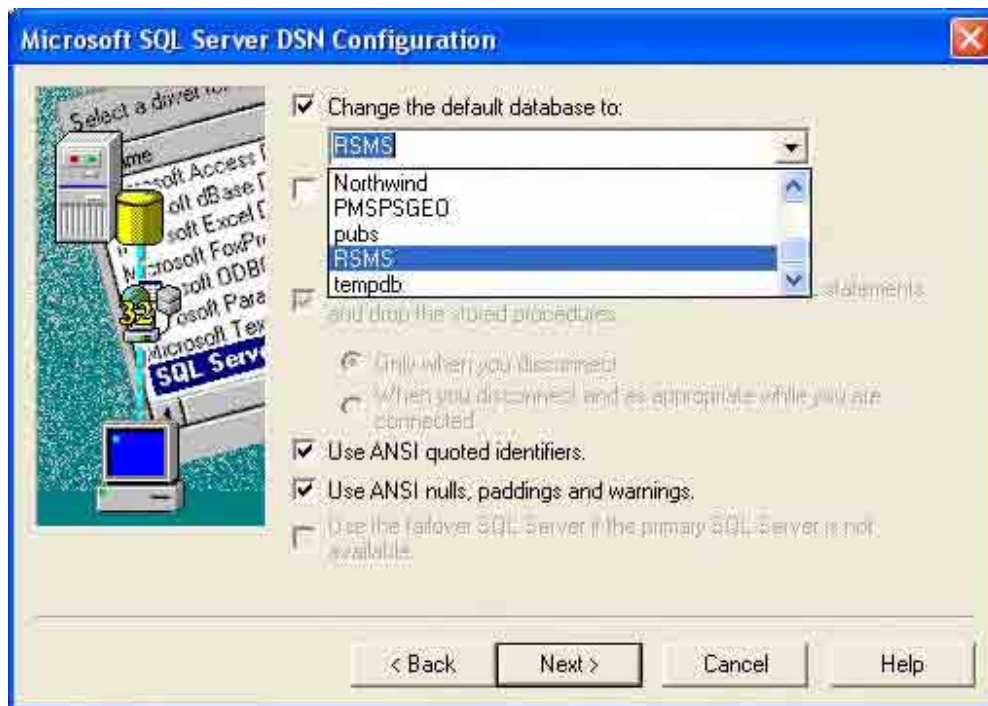
9. On the **SQL Server Authenticity** page, select **With Windows NT authentication using the Network login ID** and check the **Connect to SQL Server to obtain default settings for the additional configuration options**.



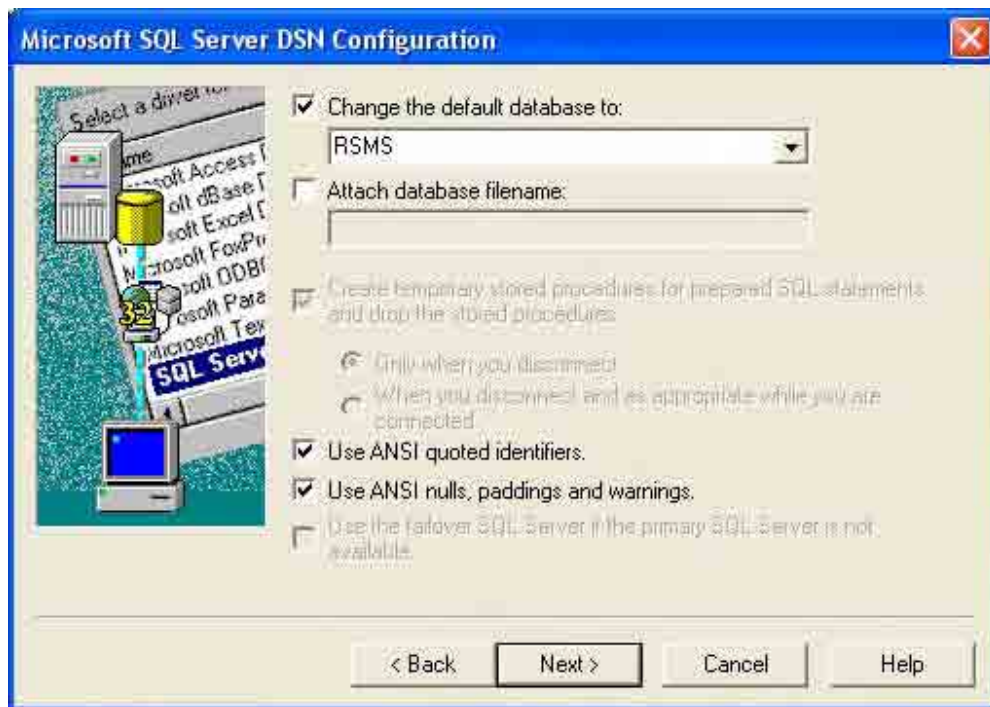
10. Click **Next**.



11. Check **Change the default database to**, and select **RSMS** from the dropdown list.



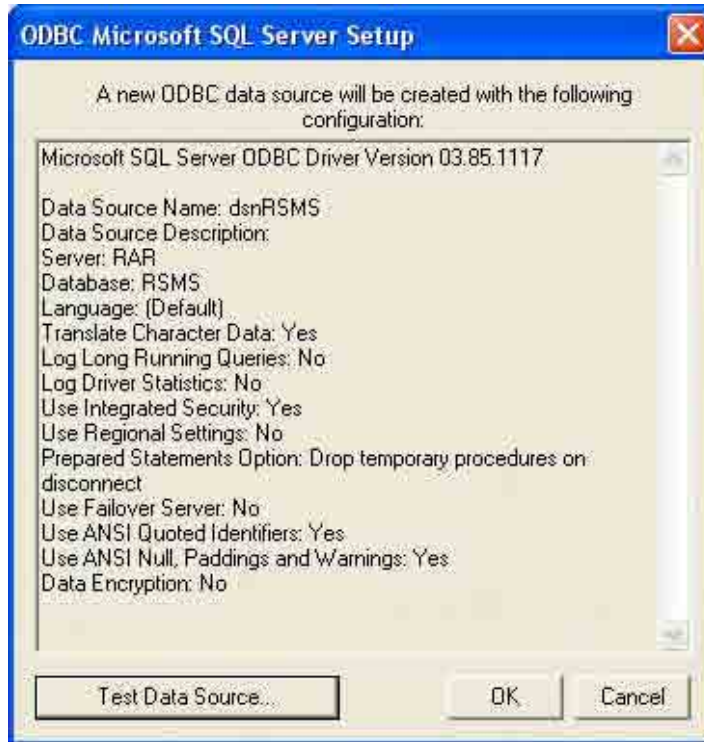
12. Click **Next**.



13. Then click **Finish**.



14. On the **ODBC Microsoft SQL Server Setup** page, click **Test Data Source** to check if the connection is successful.



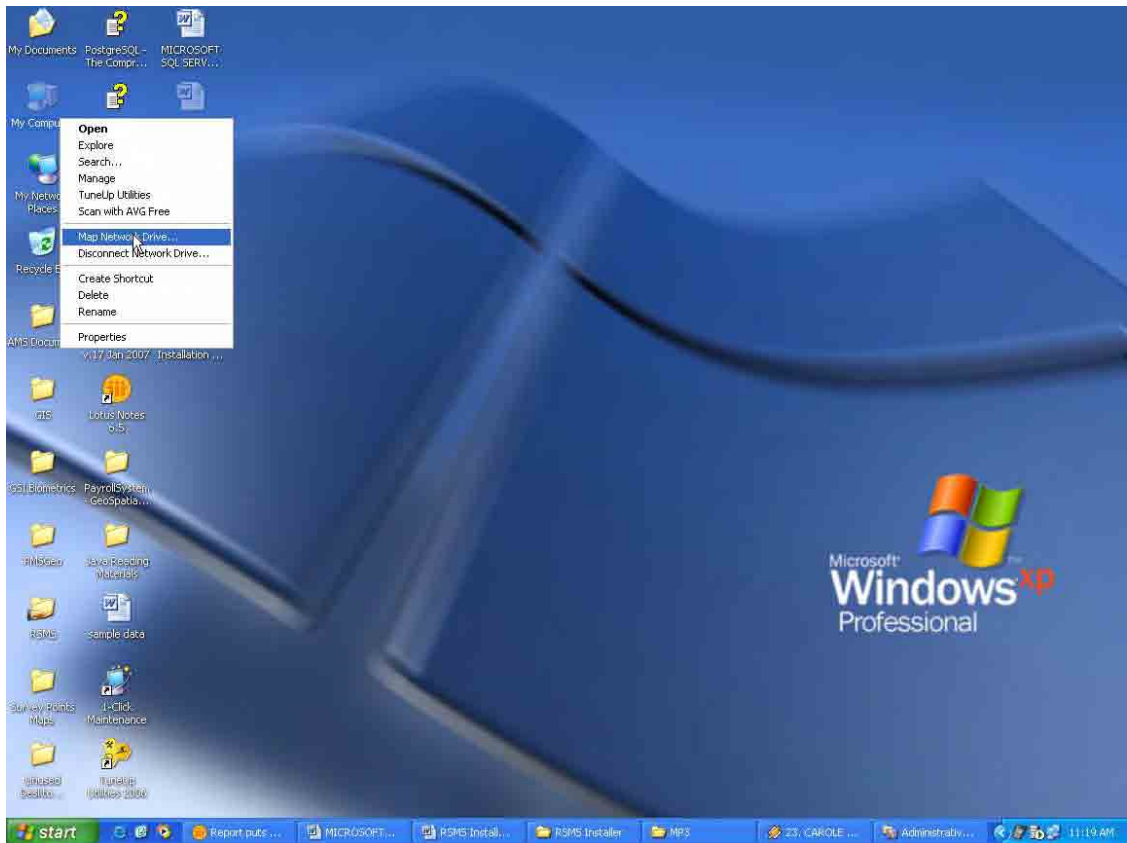
15. If the connection is successful, click **OK**.



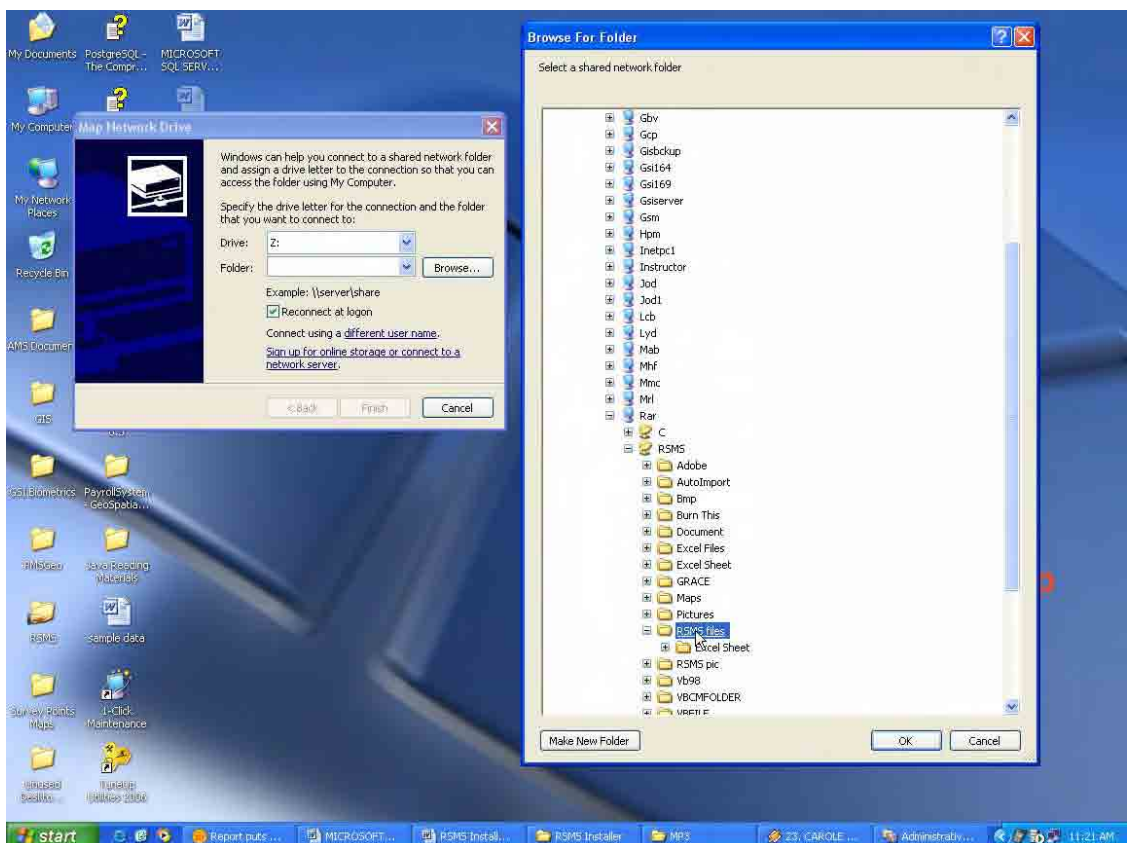
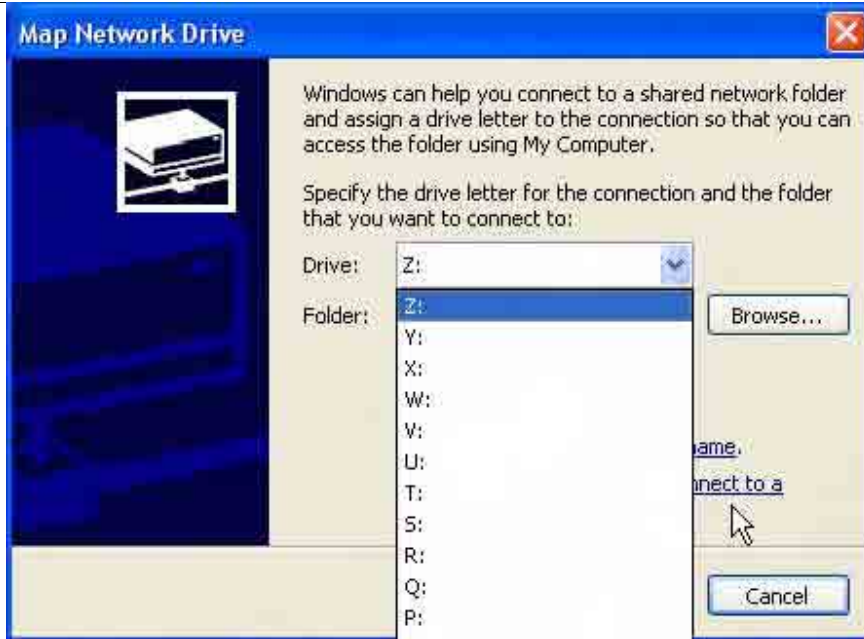
16. Then click **OK**.

Creating a Network Drive

1. Right-click **My Computer** and select **Map Network Drive**.



2. On the **Map Network Drive** dialog box, select **Z:** as the drive then click **Browse** to browse to the RSMS Server and select the **RSMS Files**.



3. Click **OK**.
4. Then click **Finish**.

