SAMSUNG New DVM-Pro

User Manual (Sales mode)

English Version

2011. 11.

00 Contents

01 New DVM-Pro Install & Run ---------------- 3

02 Sales Mode Usage Process ------------------- 5

03 Operation Procedure -------------------------- 6

(1) Project Define 7

(2) Indoor Unit Design 8

(3) Outdoor Unit Design & Connecting 10

(4) Space Management 12

(5) Piping 14

(6) System Check 17

(7) Capacity Correction 18

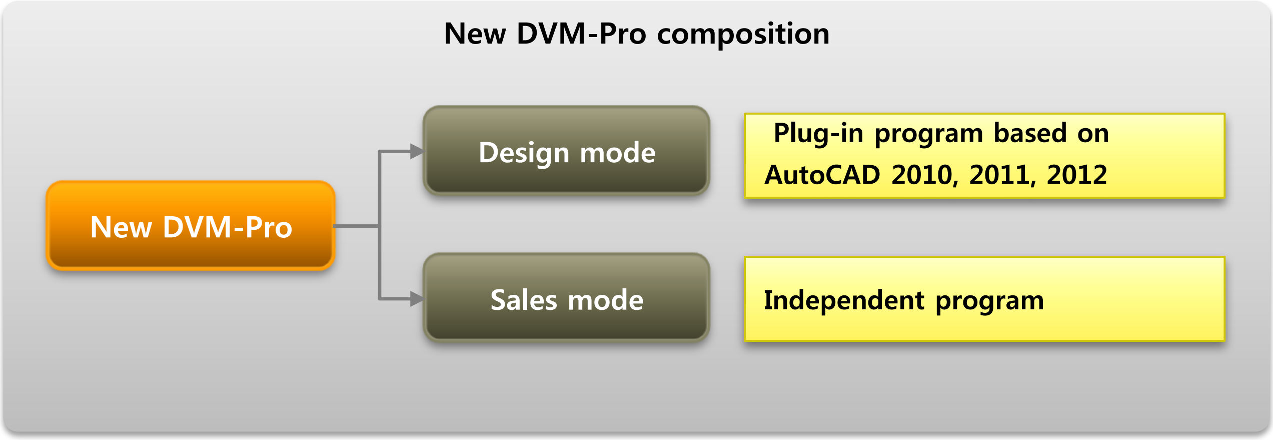
(8) Wiring Diagram 19

(9) Control System Selection 20

(10) Report 21

01 New DVM-Pro Install & Run

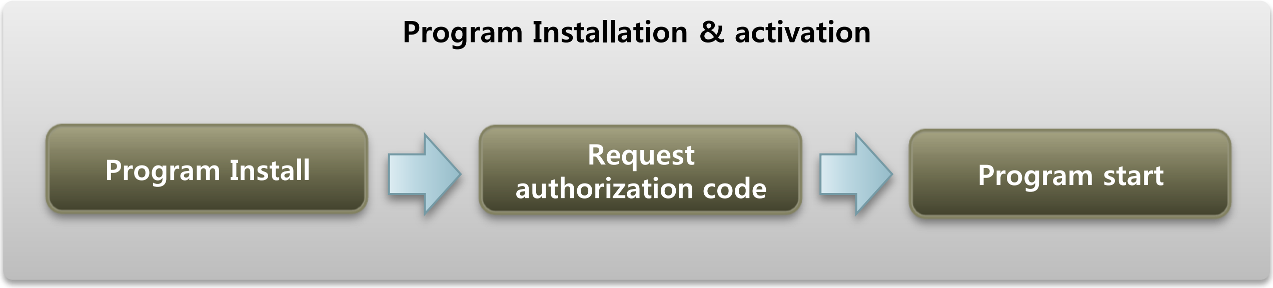
- New DVM-Pro supports Windows XP/7 32bit, 64bit system.
- After installation, the user must obtain an authorization code to use New DVM-Pro.
- New DVM-Pro is composed of 'design mode' and 'sales mode'.



New DVM-Pro composition

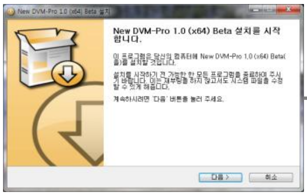
New DVM-Pro

- Design mode: Plug-in program based on AutoCAD 2010, 2011, 2012
- Sales mode: Independent program



Program Installation & activation

Program Install → Request authorization code → Program start



New DVM-Pro 1.0 (x64) Beta 설치

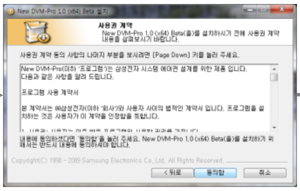
New DVM-Pro 1.0 (x64) Beta 설치를 시작합니다.

이 프로그램은 당신의 컴퓨터에 New DVM-Pro 1.0 (x64) Beta(을)를 설치할 것입니다.

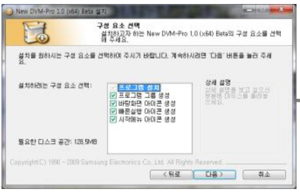
설치를 시작하기 전 가능한 한 모든 프로그램을 종료하여 주시기 바랍니다. 이는 재부팅을 하지 않고서도 시스템 파일을 수정할 수 있게 해줍니다.

계속하시려면 '다음' 버튼을 눌러 주세요.

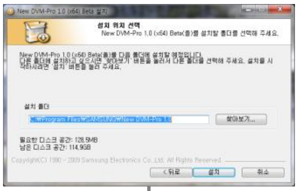
다음 >
취소



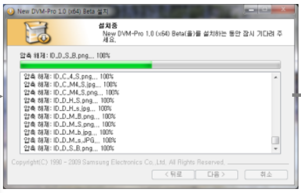
New DVM-Pro 1.0 (x64) Beta 설치
사용권 계약



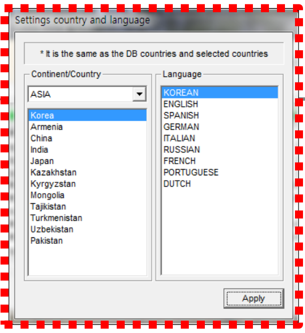
New DVM-Pro 1.0 (x64) Beta 설치
구성 요소 선택



New DVM-Pro 1.0 (x64) Beta 설치
설치 위치 선택
< 뒤로
설치
취소



New DVM-Pro 1.0 (x64) Beta 설치
설치중
< 뒤로
다음 >
취소



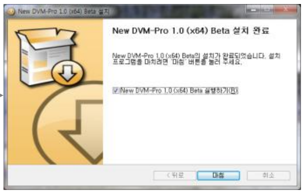
Settings country and language

* It is the same as the DB countries and selected countries

Continent/Country: ASIA

Korea (selected)
Armenia
China
India
Japan
Kazakhstan
Kyrgyzstan
Mongolia
Tajikistan
Turkmenistan
Uzbekistan
Pakistan

Language: KOREAN (selected)
ENGLISH
SPANISH
GERMAN
ITALIAN
RUSSIAN
FRENCH
PORTUGUESE
DUTCH



New DVM-Pro 1.0 (x64) Beta 설치

New DVM-Pro 1.0 (x64) Beta 설치 완료

New DVM-Pro 1.0 (x64) Beta의 설치가 완료되었습니다. 설치 프로그램을 마치려면 '마침' 버튼을 눌러 주세요.

☑ New DVM-Pro 1.0 (x64) Beta 실행하기(R)

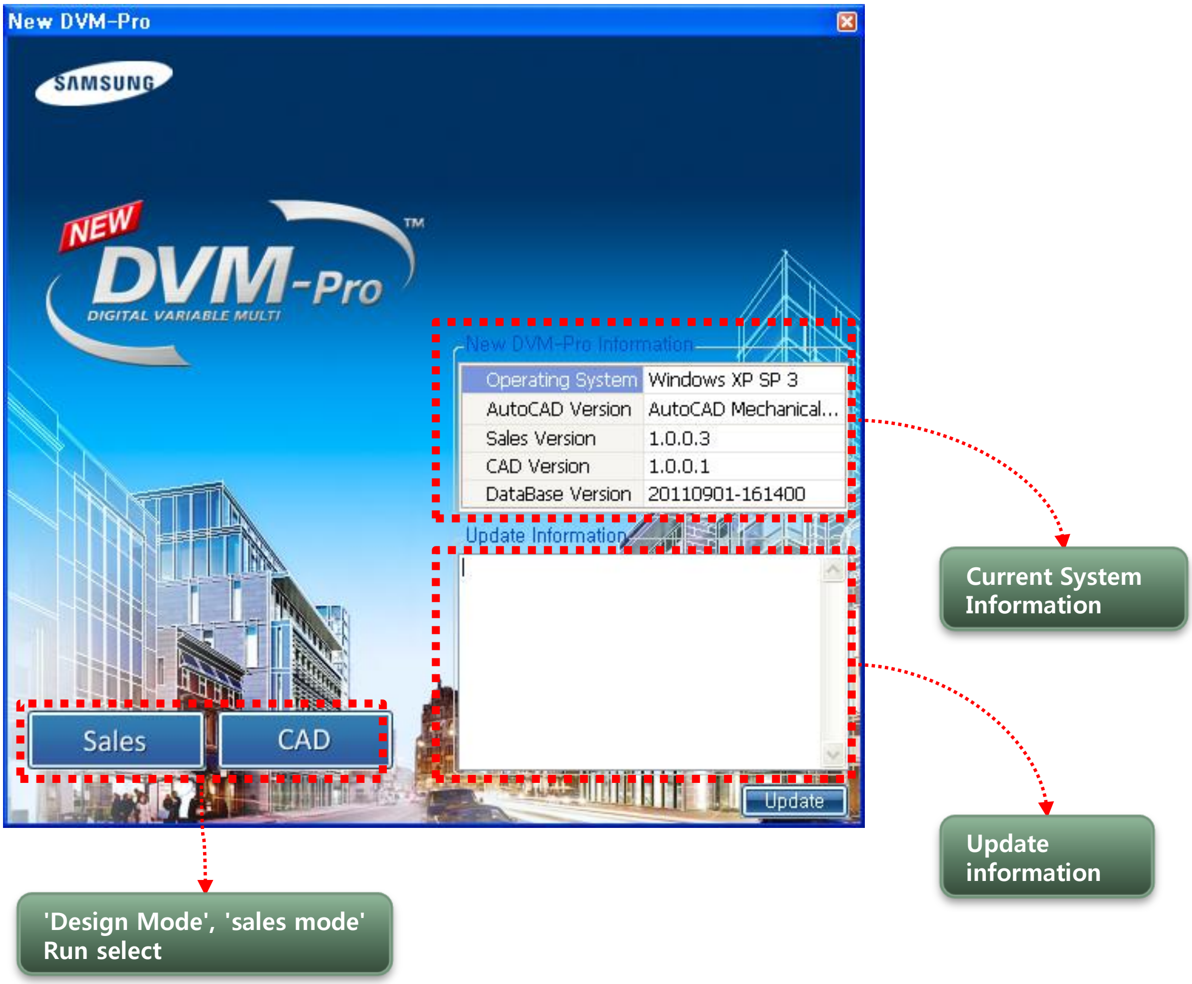
< 뒤로
마침
취소

Country & language must be selected in the installation process. Once installation is done, the user must contact Samsung's DVM-Pro administrator to make changes.

Select your country & language

01 New DVM-Pro Install & Run

- New DVM-Pro is composed of the 'design mode' and 'sales mode' , so in starting the program the following window appears and the user can choose between the two modes.
- The update information appears in the below section and the user can make the update optionally.


New DVM-Pro
SAMSUNG
NEW DVM-Pro TM
DIGITAL VARIABLE MULTI
Sales
CAD
Update

New DVM-Pro Information

Operating System	Windows XP SP 3
AutoCAD Version	AutoCAD Mechanical...
Sales Version	1.0.0.3
CAD Version	1.0.0.1
DataBase Version	20110901-161400

Update Information

Current System Information

Update information

'Design Mode', 'sales mode' Run select

02 Sales Mode Usage Process

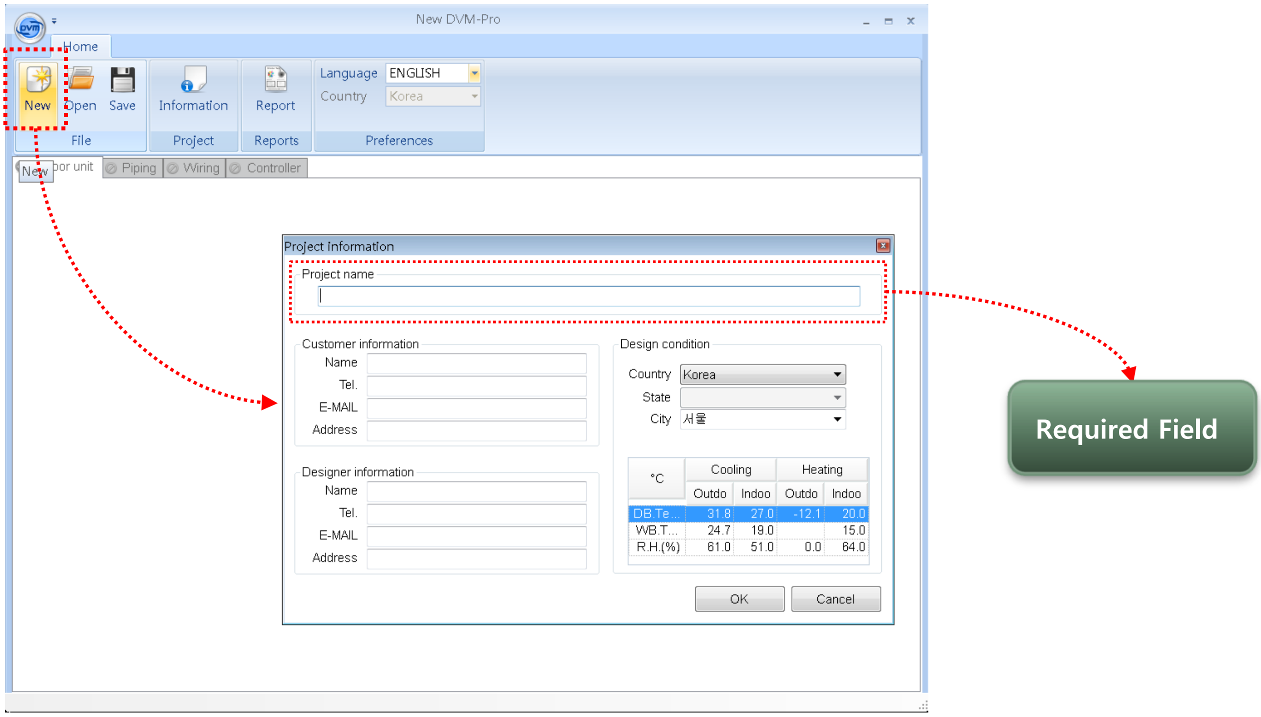
New DVM-Pro sales mode procedure is as follows.

01	**Project Define**	
02	**Indoor Unit Design**	• Register room information (name, required load) / Input demand load / Add indoor unit
03	**Outdoor Unit Design & Connecting**	• Register the appropriate outdoor unit for the selected indoor unit
04	**Space Management**	• Floor & Building, Room & floor can be managed together
05	**Pipe drawing**	• Create visualized route. Output with .dwg & .jpg file is possible • Creating a pipe system the user wants is possible by using the manual and automatic drawing function
06	**System Check**	• Check for any errors
07	**Capacity Correction**	• Capacity Correction
08	**Wire Diagram**	• Create visualized wiring • Output with .dwg & .jpg file is possible
09	**Control System**	• Create schematic drawing for Control system
10	**Report**	• Create Report

03 Operation Procedure

(1) Project Define

- To create the project, enter basic information.
- Enter the project name, the project name will be saved as the file name. file format is ".dvmx".
- Customer and designer information entering is optional.
- In the Design condition, select your city. It also can be edited manually.


New DVM-Pro
Home
New
Open
Save
Information
Report
File
Project
Reports
Preferences
New
oor unit
Piping
Wiring
Controller
OK
Cancel

Language: ENGLISH
Country: Korea

Project information

Project name

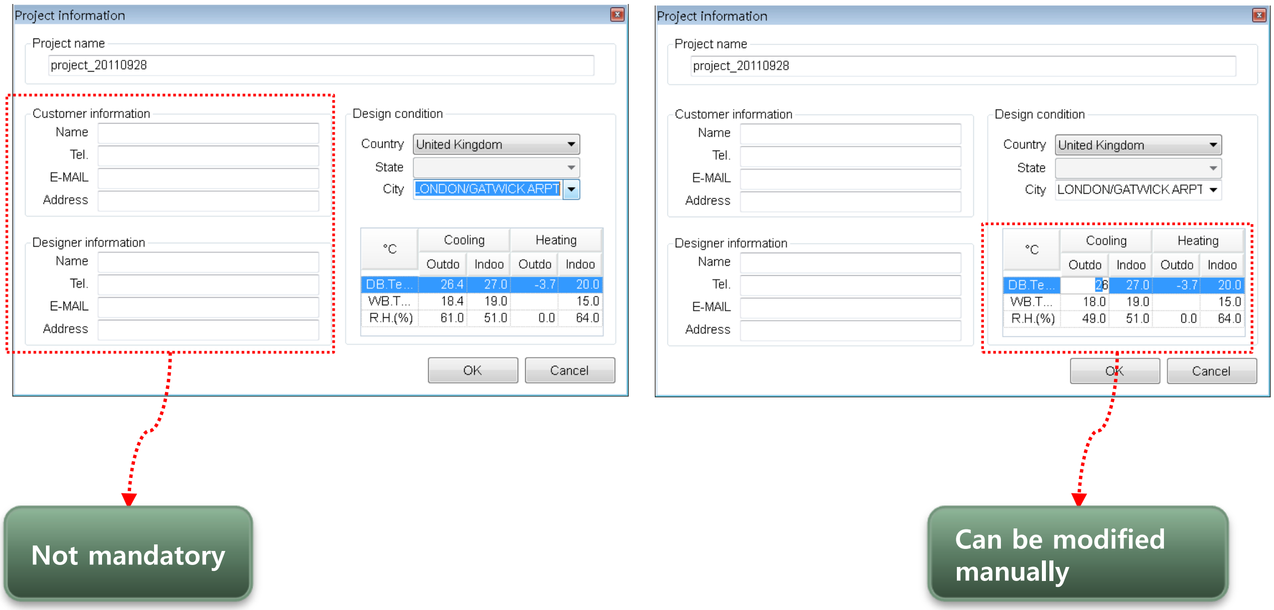
Customer information: Name, Tel., E-MAIL, Address

Designer information: Name, Tel., E-MAIL, Address

Design condition
Country: Korea
State:
City: 서울

°C	Cooling		Heating	
	Outdo	Indoo	Outdo	Indoo
DB.Te...	31.8	27.0	-12.1	20.0
WB.T...	24.7	19.0		15.0
R.H.(%)	61.0	51.0	0.0	64.0

Required Field


OK
Cancel
OK
Cancel

Project information

Project name: project_20110928

Customer information: Name, Tel., E-MAIL, Address

Designer information: Name, Tel., E-MAIL, Address

Design condition
Country: United Kingdom
State:
City: LONDON/GATWICK ARPT

°C	Cooling		Heating	
	Outdo	Indoo	Outdo	Indoo
DB.Te...	26.4	27.0	-3.7	20.0
WB.T...	18.4	19.0		15.0
R.H.(%)	61.0	51.0	0.0	64.0

Project information

Project name: project_20110928

Customer information: Name, Tel., E-MAIL, Address

Designer information: Name, Tel., E-MAIL, Address

Design condition
Country: United Kingdom
State:
City: LONDON/GATWICK ARPT

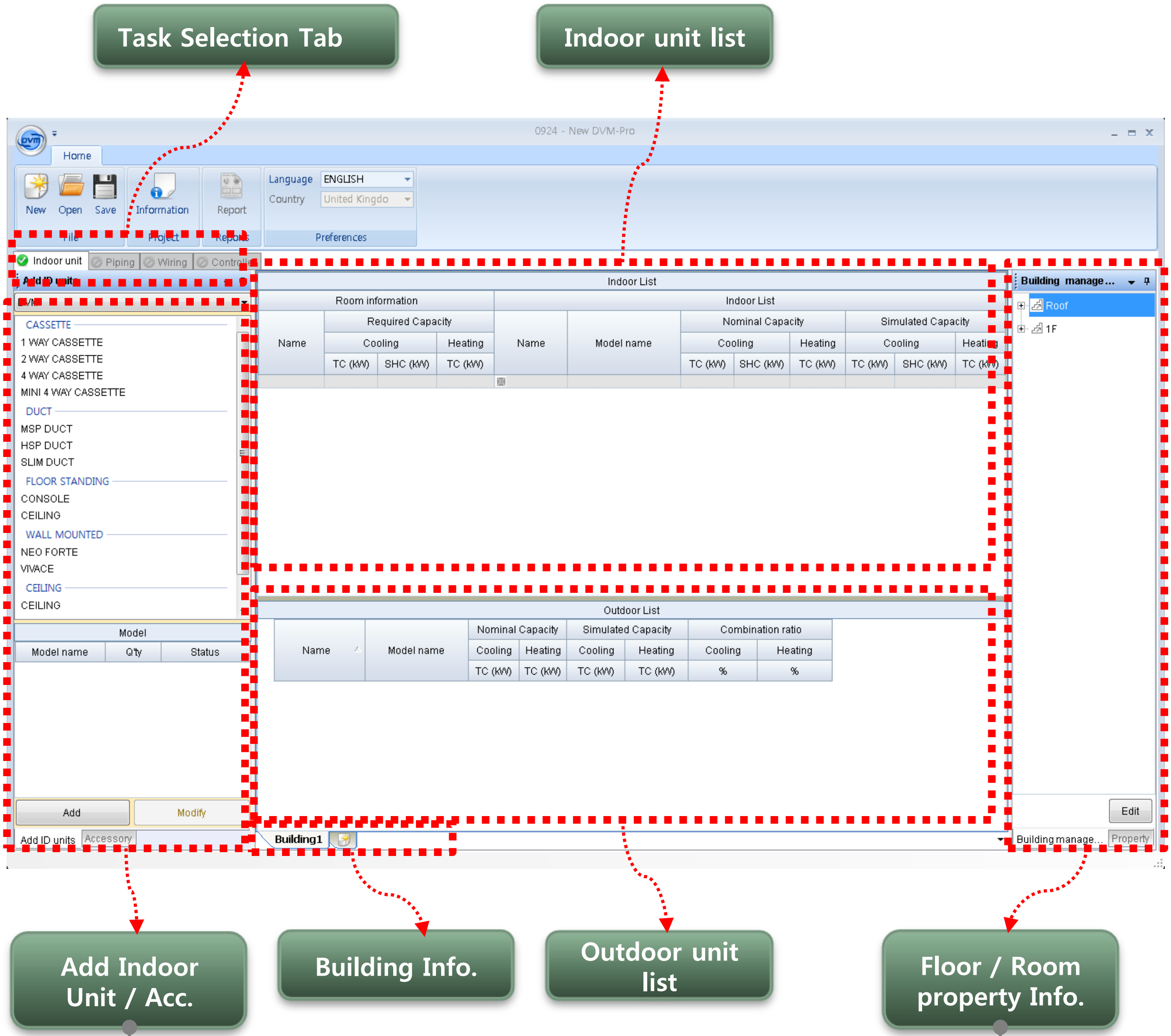
°C	Cooling		Heating	
	Outdo	Indoo	Outdo	Indoo
DB.Te...	26	27.0	-3.7	20.0
WB.T...	18.0	19.0		15.0
R.H.(%)	49.0	51.0	0.0	64.0

Not mandatory

Can be modified manually

(1) Project Define

- New DVM-Pro sales mode default interface are as follows:
- Room defining, indoor & outdoor unit selection and connection, system information checking can be done on one screen.

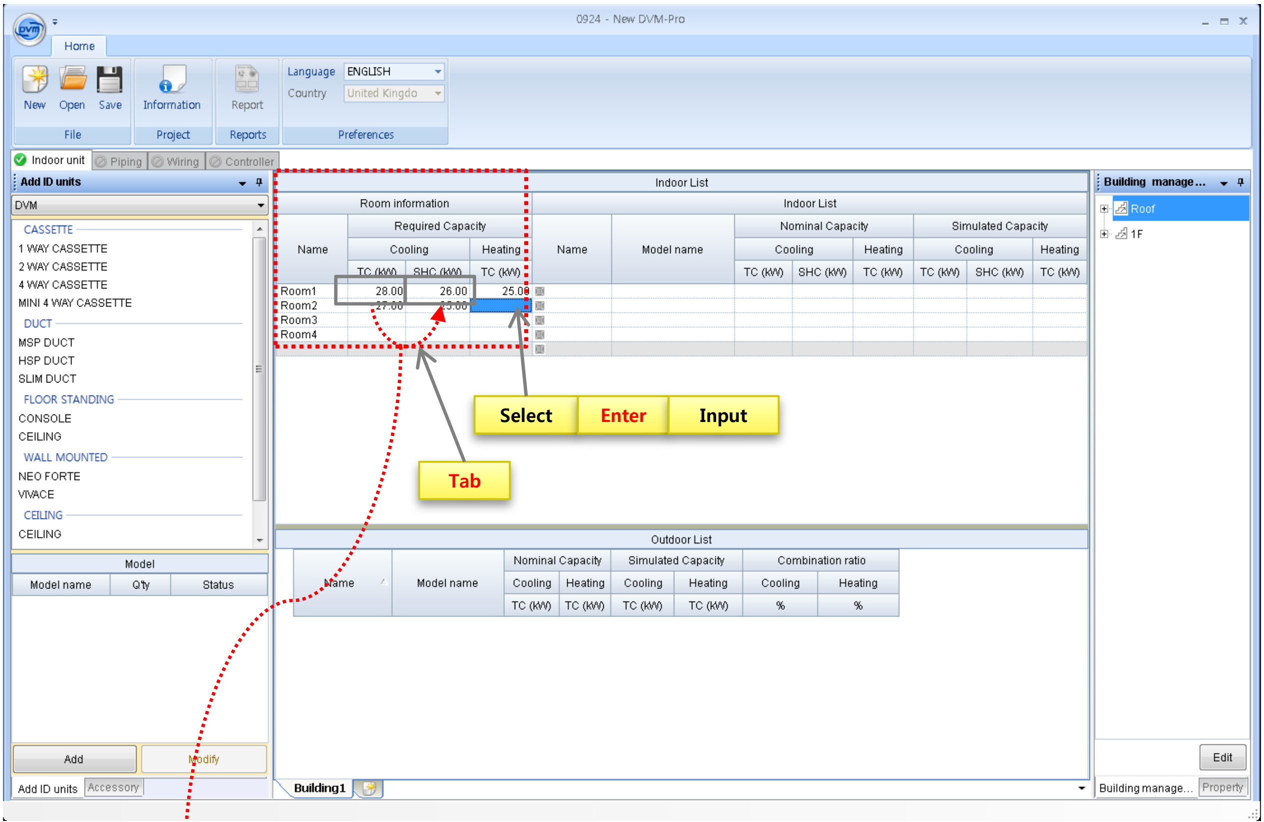

Task Selection Tab
Indoor unit list
0924 - New DVM-Pro
Home
New
Open
Save
Information
Report
File
Project
Reports
Language
ENGLISH
Country
United Kingdo
Preferences
Indoor unit
Piping
Wiring
Control
Add ID units
CASSETTE
1 WAY CASSETTE
2 WAY CASSETTE
4 WAY CASSETTE
MINI 4 WAY CASSETTE
DUCT
MSP DUCT
HSP DUCT
SLIM DUCT
FLOOR STANDING
CONSOLE
CEILING
WALL MOUNTED
NEO FORTE
VIVACE
CEILING
CEILING
Model
Model name
Q'ty
Status
Add
Modify
Add ID units
Accessory
Indoor List
Room information
Required Capacity
Name
Cooling
Heating
TC (kW)
SHC (kW)
Model name
Nominal Capacity
Simulated Capacity
Outdoor List
Combination ratio
%
Building1
Building manage...
Roof
1F
Edit
Property
Add Indoor Unit / Acc.
Building Info.
Outdoor unit list
Floor / Room property Info.

- An interface to add indoor unit and accessories
- Window location change can be made by drag & drop.

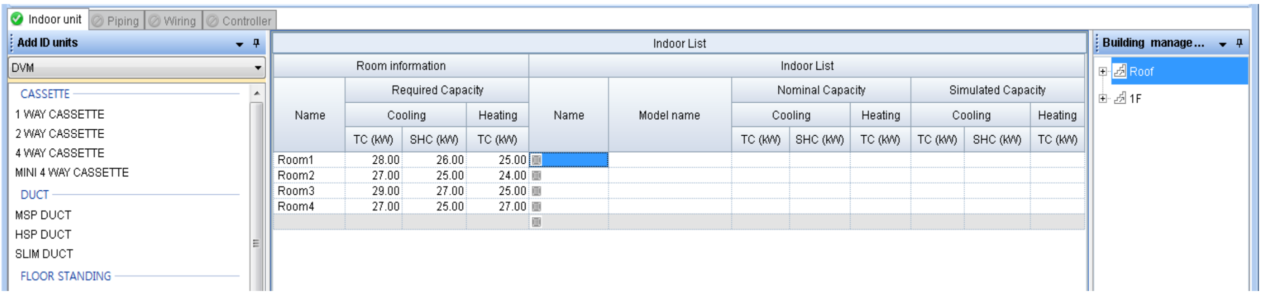
- Menu for setting building floors and rooms
- Information for the selected indoor and outdoor unit

(2) Indoor Unit Design – Room Info.

- To register Indoor unit, Room name and demand load must be registered first.
- To enter a value in the grid, select the position then press 'Enter'. Use 'Tab' key to move on to the next space.
- Data entering and management can be done easily using the 'Enter' and 'Tab' keys,



Enter the room information

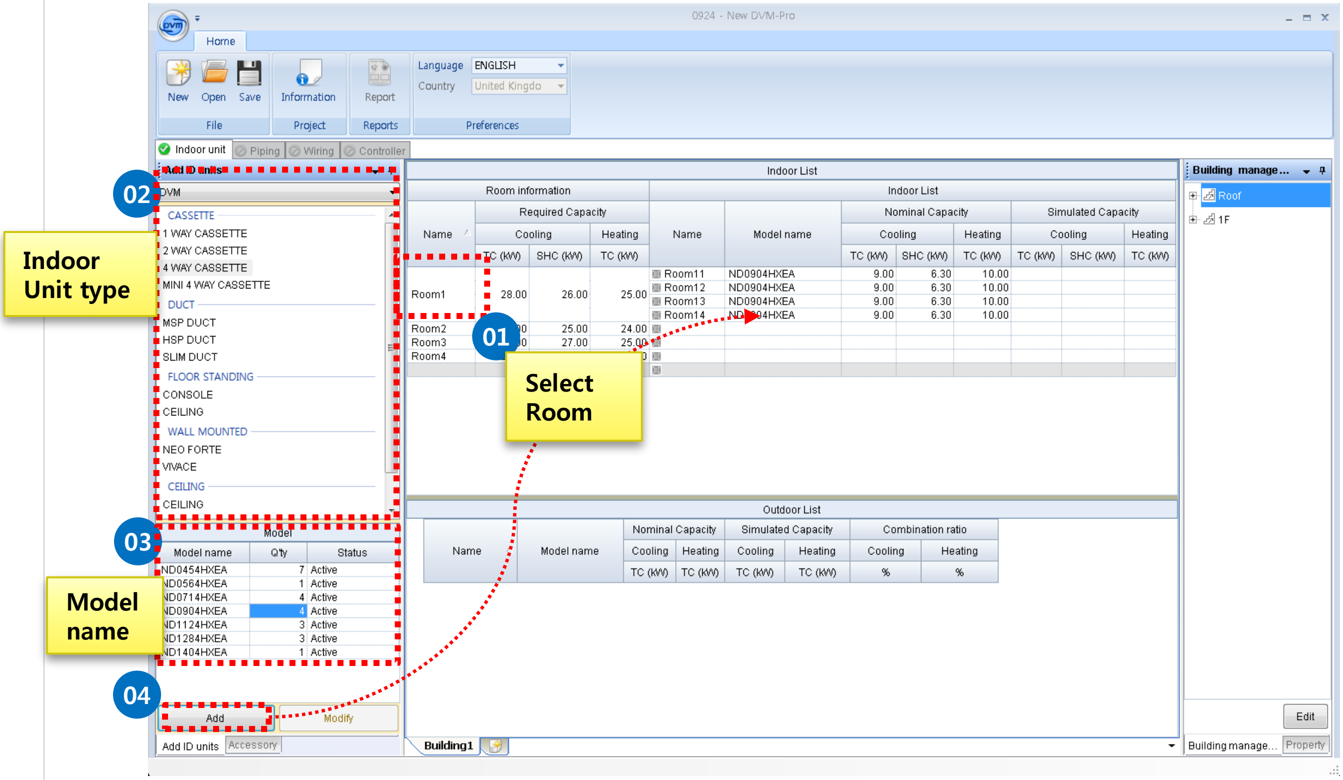


Name	Required Capacity Cooling TC (kW)	Required Capacity Cooling SHC (kW)	Required Capacity Heating TC (kW)
Room1	28.00	26.00	25.00
Room2	27.00	25.00	24.00
Room3	29.00	27.00	25.00
Room4	27.00	25.00	27.00

03 Operation Procedure

(2) Indoor Unit Design – Select & register indoor unit

- Select the corresponding room, then add the indoor unit using the "Add" button.

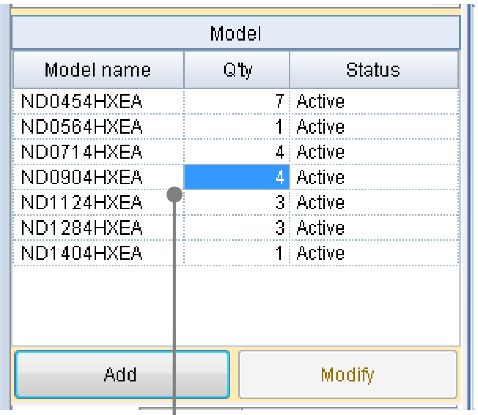

0924 - New DVM-Pro
Home
New
Open
Save
File
Information
Project
Report
Reports
Language ENGLISH
Country United Kingdo
Preferences
Indoor unit
Piping
Wiring
Controller
Add ID units
DVM
CASSETTE
1 WAY CASSETTE
2 WAY CASSETTE
4 WAY CASSETTE
MINI 4 WAY CASSETTE
DUCT
MSP DUCT
HSP DUCT
SLIM DUCT
FLOOR STANDING
CONSOLE
CEILING
WALL MOUNTED
NEO FORTE
VIVACE
CEILING
CEILING
Add
Modify
Add ID units
Accessory
Building1
Building manage...
Roof
1F
Edit
Property
02
Indoor Unit type
03
Model name
04
01
Select Room

Indoor List

Room information				Indoor List							
Name	Required Capacity			Name	Model name	Nominal Capacity			Simulated Capacity		
	Cooling		Heating			Cooling		Heating	Cooling		Heating
	TC (kW)	SHC (kW)	TC (kW)			TC (kW)	SHC (kW)	TC (kW)	TC (kW)	SHC (kW)	TC (kW)
Room1	28.00	26.00	25.00	Room11	ND0904HXEA	9.00	6.30	10.00			
				Room12	ND0904HXEA	9.00	6.30	10.00			
				Room13	ND0904HXEA	9.00	6.30	10.00			
				Room14	ND0904HXEA	9.00	6.30	10.00			
Room2	[illegible]	25.00	24.00								
Room3	[illegible]	27.00	25.00								
Room4	[illegible]	[illegible]	[illegible]								

Outdoor List

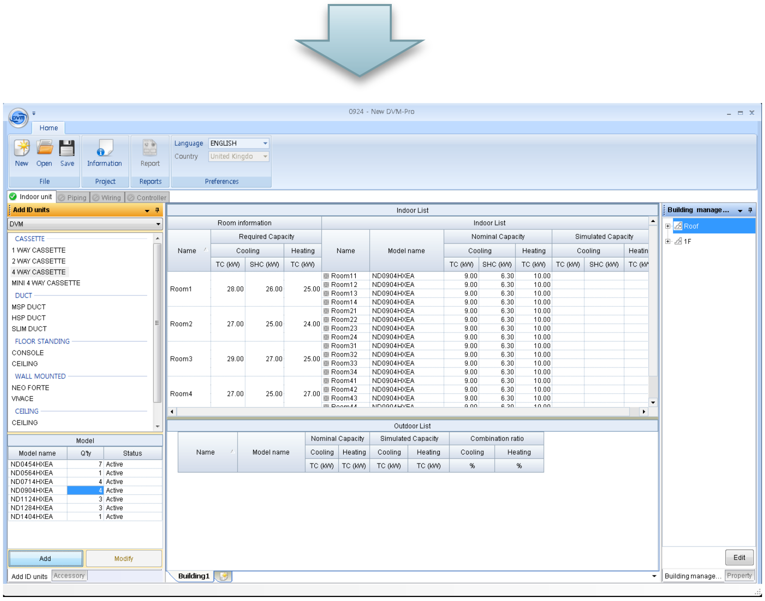
Name	Model name	Nominal Capacity		Simulated Capacity		Combination ratio	
		Cooling	Heating	Cooling	Heating	Cooling	Heating
		TC (kW)	TC (kW)	TC (kW)	TC (kW)	%	%



Model

Model name	Q'ty	Status
ND0454HXEA	7	Active
ND0564HXEA	1	Active
ND0714HXEA	4	Active
ND0904HXEA	4	Active
ND1124HXEA	3	Active
ND1284HXEA	3	Active
ND1404HXEA	1	Active

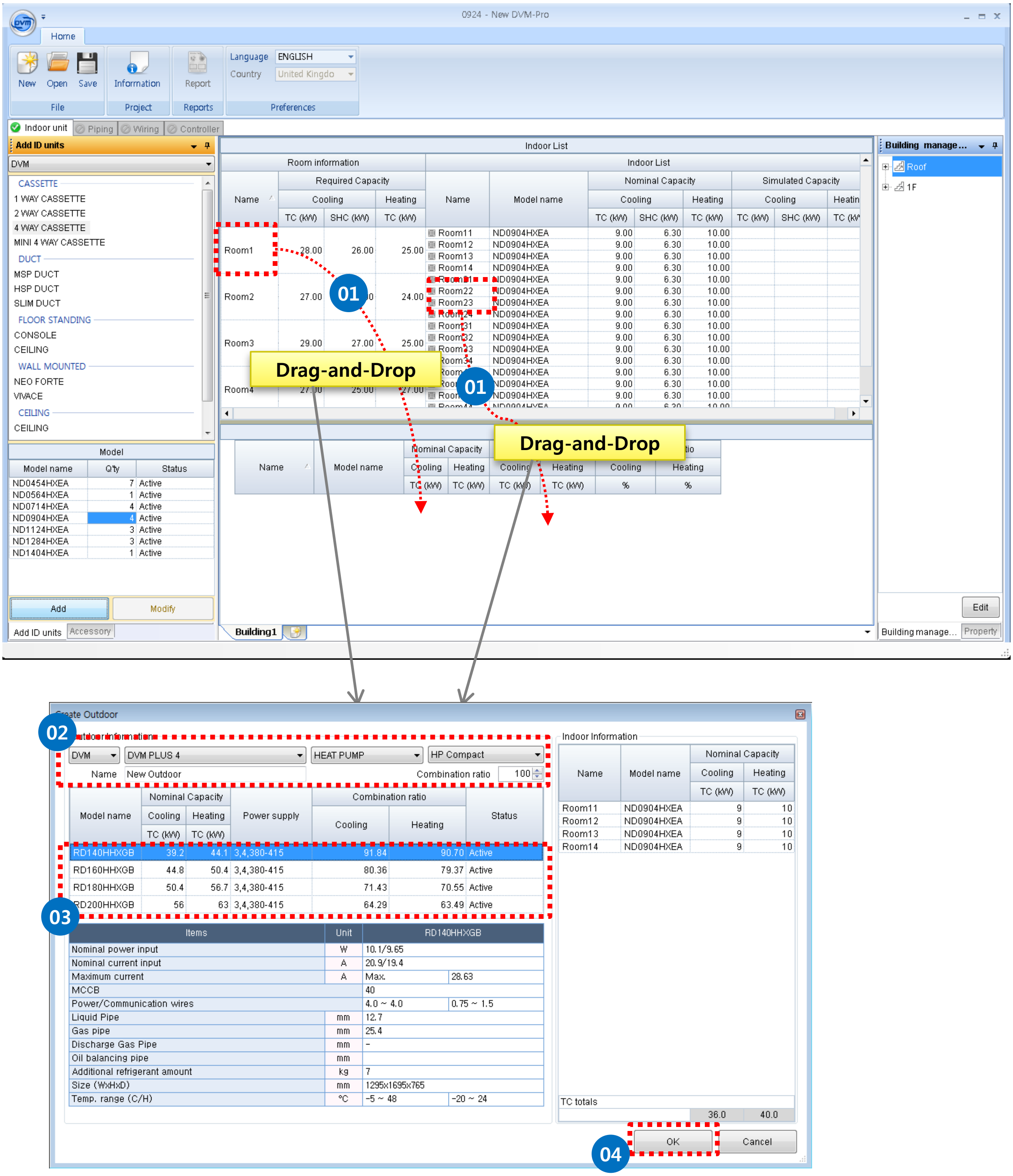
If you select the model, it automatically calculates the quantity and can be changed manually



03 Operation Procedure

(3) Outdoor Unit registration

- To register the outdoor unit, select room or indoor unit from the list of the indoor units, then drag and drop to the outdoor unit list. A window will appear for registering the outdoor unit.
- Select the type and model of the outdoor unit and enter "OK", then the outdoor unit is registered.


0924 - New DVM-Pro
Home
New
Open
Save
File
Information
Project
Report
Reports
Indoor unit
Piping
Wiring
Controller
Add ID units
CASSETTE
1 WAY CASSETTE
2 WAY CASSETTE
4 WAY CASSETTE
MINI 4 WAY CASSETTE
DUCT
MSP DUCT
HSP DUCT
SLIM DUCT
FLOOR STANDING
CONSOLE
CEILING
WALL MOUNTED
NEO FORTE
VIVACE
CEILING
CEILING
Add
Modify
Add ID units
Accessory
Building1
Building manage...
Roof
1F
Edit
Property
01
Drag-and-Drop
01
Drag-and-Drop
Create Outdoor
02
Outdoor Information
03
Indoor Information
04
OK
Cancel

Preferences: Language ENGLISH; Country United Kingdo

Add ID units: DVM

Model name	Q'ty	Status
ND0454HXEA	7	Active
ND0564HXEA	1	Active
ND0714HXEA	4	Active
ND0904HXEA	4	Active
ND1124HXEA	3	Active
ND1284HXEA	3	Active
ND1404HXEA	1	Active

Indoor List

Room information				Indoor List								
Name	Required Capacity			Name	Model name	Nominal Capacity			Simulated Capacity			
	Cooling		Heating			Cooling		Heating	Cooling		Heatin	
	TC (kW)	SHC (kW)	TC (kW)			TC (kW)	SHC (kW)	TC (kW)	TC (kW)	SHC (kW)	TC (kW	
Room1	28.00	26.00	25.00	Room11	ND0904HXEA	9.00	6.30	10.00				
				Room12	ND0904HXEA	9.00	6.30	10.00				
				Room13	ND0904HXEA	9.00	6.30	10.00				
				Room14	ND0904HXEA	9.00	6.30	10.00				
Room2	27.00		24.00		ND0904HXEA	9.00	6.30	10.00				
				Room22	ND0904HXEA	9.00	6.30	10.00				
				Room23	ND0904HXEA	9.00	6.30	10.00				
					ND0904HXEA	9.00	6.30	10.00				
Room3	29.00	27.00	25.00	Room31	ND0904HXEA	9.00	6.30	10.00				
				Room32	ND0904HXEA	9.00	6.30	10.00				
				Room33	ND0904HXEA	9.00	6.30	10.00				
				Room34	ND0904HXEA	9.00	6.30	10.00				
Room4	27.00	25.00	27.00		ND0904HXEA	9.00	6.30	10.00				
					ND0904HXEA	9.00	6.30	10.00				
					ND0904HXEA	9.00	6.30	10.00				

Name	Model name	Nominal Capacity				Combination ratio	
		Cooling	Heating	Cooling	Heating	Cooling	Heating
		TC (kW)	TC (kW)	TC (kW)	TC (kW)	%	%

Create Outdoor

Outdoor Information: DVM; DVM PLUS 4; HEAT PUMP; HP Compact

Name: New Outdoor; Combination ratio: 100

Model name	Nominal Capacity		Power supply	Combination ratio		Status
	Cooling	Heating		Cooling	Heating	
	TC (kW)	TC (kW)				
RD140HHXGB	39.2	44.1	3,4,380-415	91.84	90.70	Active
RD160HHXGB	44.8	50.4	3,4,380-415	80.36	79.37	Active
RD180HHXGB	50.4	56.7	3,4,380-415	71.43	70.55	Active
RD200HHXGB	56	63	3,4,380-415	64.29	63.49	Active

Items	Unit	RD140HHXGB	
Nominal power input	W	10.1/9.65	
Nominal current input	A	20.9/19.4	
Maximum current	A	Max.	28.63
MCCB		40	
Power/Communication wires		4.0 ~ 4.0	0.75 ~ 1.5
Liquid Pipe	mm	12.7	
Gas pipe	mm	25.4	
Discharge Gas Pipe	mm	-	
Oil balancing pipe	mm		
Additional refrigerant amount	kg	7	
Size (WxHxD)	mm	1295x1695x765	
Temp. range (C/H)	°C	-5 ~ 48	-20 ~ 24

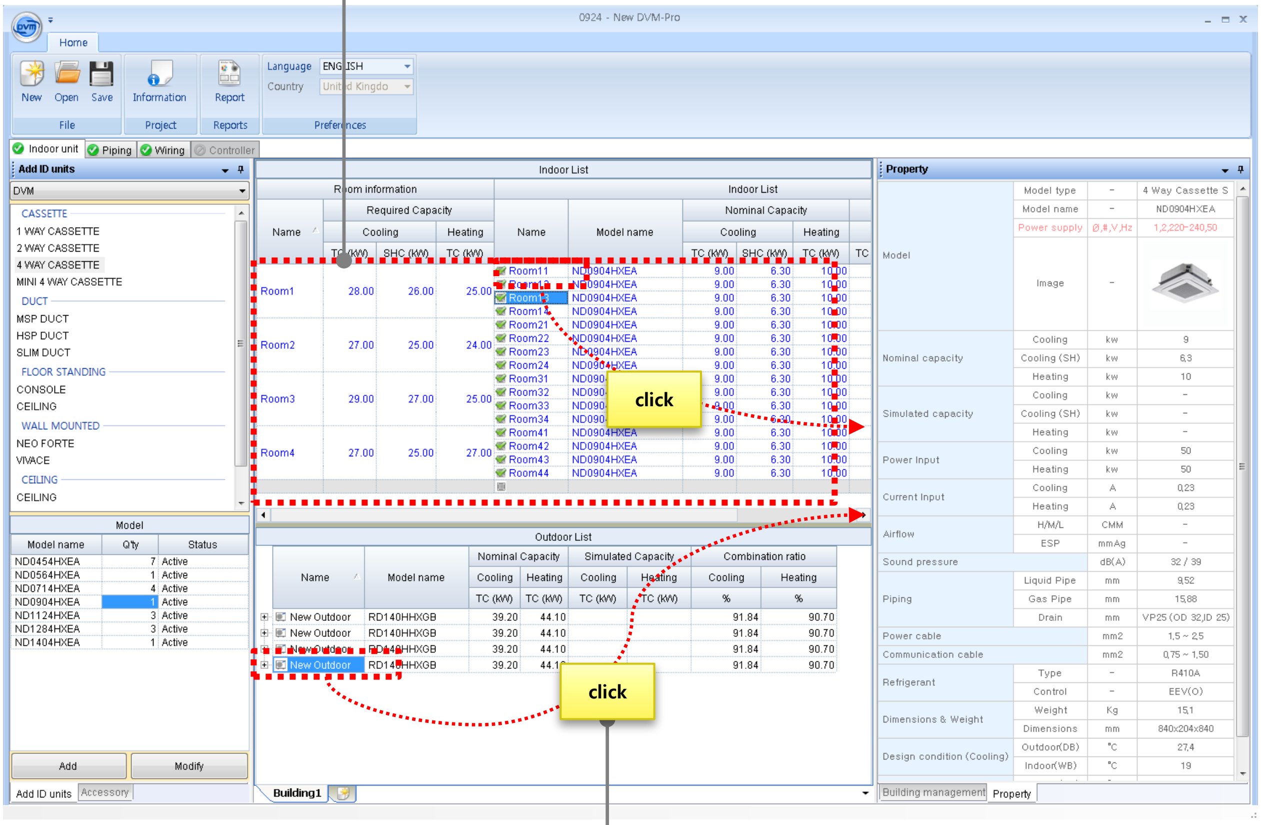
Indoor Information

Name	Model name	Nominal Capacity	
		Cooling	Heating
		TC (kW)	TC (kW)
Room11	ND0904HXEA	9	10
Room12	ND0904HXEA	9	10
Room13	ND0904HXEA	9	10
Room14	ND0904HXEA	9	10
TC totals		36.0	40.0

(3) Outdoor Unit Registration

- Once registered, color distinguishment is made as the figure below. The connected indoor unit can be identified in the Outdoor unit list.

The connected outdoor and indoor units and the unconnected units can be distinguished by color



Language: ENGLISH
Country: United Kingdo

DVM

CASSETTE
1 WAY CASSETTE
2 WAY CASSETTE
4 WAY CASSETTE
MINI 4 WAY CASSETTE
DUCT
MSP DUCT
HSP DUCT
SLIM DUCT
FLOOR STANDING
CONSOLE
CEILING
WALL MOUNTED
NEO FORTE
VIVACE
CEILING
CEILING

Model

Model name	Q'ty	Status
ND0454HXEA	7	Active
ND0564HXEA	1	Active
ND0714HXEA	4	Active
ND0904HXEA	1	Active
ND1124HXEA	3	Active
ND1284HXEA	3	Active
ND1404HXEA	1	Active

Indoor List

Room information				Indoor List					
	Required Capacity					Nominal Capacity			
Name	Cooling		Heating	Name	Model name	Cooling		Heating	
	TC (KW)	SHC (KW)	TC (KW)			TC (KW)	SHC (KW)	TC (KW)	TC
Room1	28.00	26.00	25.00	Room11	ND0904HXEA	9.00	6.30	10.00	
				Room12	ND0904HXEA	9.00	6.30	10.00	
				Room13	ND0904HXEA	9.00	6.30	10.00	
				Room14	ND0904HXEA	9.00	6.30	10.00	
Room2	27.00	25.00	24.00	Room21	ND0904HXEA	9.00	6.30	10.00	
				Room22	ND0904HXEA	9.00	6.30	10.00	
				Room23	ND0904HXEA	9.00	6.30	10.00	
				Room24	ND0904HXEA	9.00	6.30	10.00	
Room3	29.00	27.00	25.00	Room31	ND090	9.00	6.30	10.00	
				Room32	ND090	9.00	6.30	10.00	
				Room33	ND090	9.00	6.30	10.00	
				Room34	ND090	9.00	6.30	10.00	
Room4	27.00	25.00	27.00	Room41	ND0904HXEA	9.00	6.30	10.00	
				Room42	ND0904HXEA	9.00	6.30	10.00	
				Room43	ND0904HXEA	9.00	6.30	10.00	
				Room44	ND0904HXEA	9.00	6.30	10.00	

Outdoor List

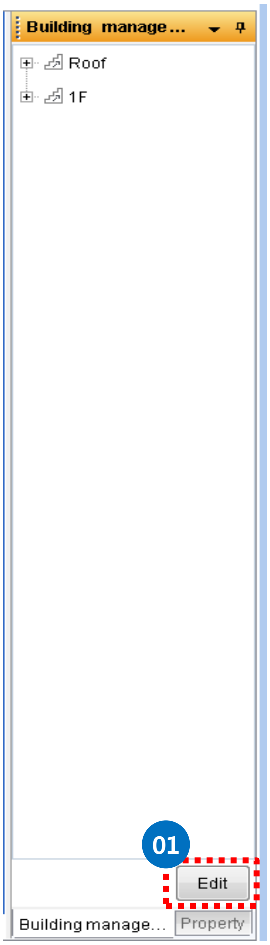
Name	Model name	Nominal Capacity		Simulated Capacity		Combination ratio	
		Cooling	Heating	Cooling	Heating	Cooling	Heating
		TC (KW)	TC (KW)	TC (KW)	TC (KW)	%	%
New Outdoor	RD140HHXGB	39.20	44.10			91.84	90.70
New Outdoor	RD140HHXGB	39.20	44.10			91.84	90.70
New Outdoor	RD140HHXGB	39.20	44.10			91.84	90.70
New Outdoor	RD140HHXGB	39.20	44.1			91.84	90.70

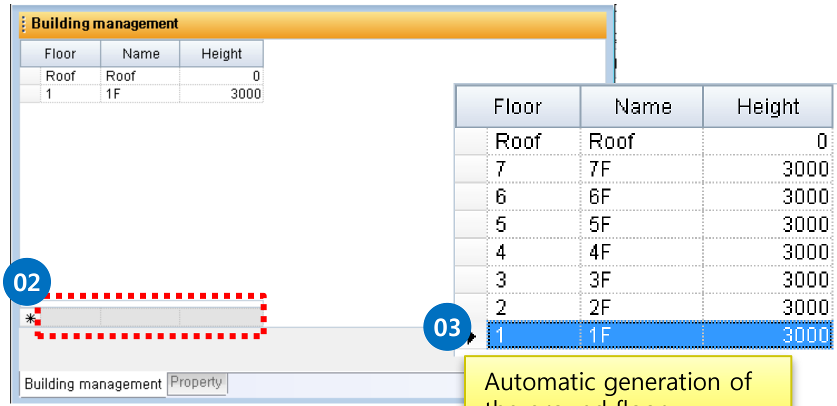
Property

Model	Model type	-	4 Way Cassette S
	Model name	-	ND0904HXEA
	Power supply	Ø,#,V,Hz	1,2,220-240,50
	Image	-	
Nominal capacity	Cooling	kw	9
	Cooling (SH)	kw	6,3
	Heating	kw	10
Simulated capacity	Cooling	kw	-
	Cooling (SH)	kw	-
	Heating	kw	-
Power Input	Cooling	kw	50
	Heating	kw	50
Current Input	Cooling	A	0,23
	Heating	A	0,23
Airflow	H/M/L	CMM	-
	ESP	mmAg	-
Sound pressure		dB(A)	32 / 39
Piping	Liquid Pipe	mm	9,52
	Gas Pipe	mm	15,88
	Drain	mm	VP25 (OD 32,ID 25)
Power cable		mm2	1,5 ~ 2,5
Communication cable		mm2	0,75 ~ 1,50
Refrigerant	Type	-	R410A
	Control	-	EEV(O)
Dimensions & Weight	Weight	Kg	15,1
	Dimensions	mm	840x204x840
Design condition (Cooling)	Outdoor(DB)	°C	27,4
	Indoor(WB)	°C	19

Double-clicking indoor, outdoor shows the product details

- New DVM-Pro can manage the floors and rooms in conjunction.


Building manage...
Roof
1F
01
Edit
Building manage...
Property

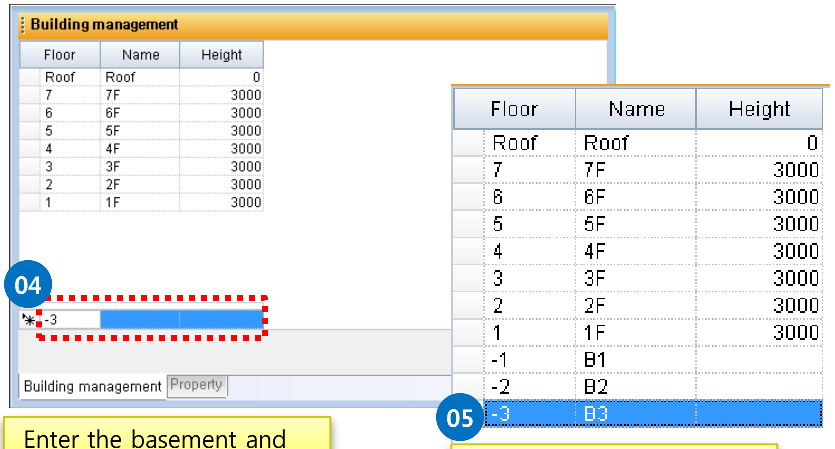

Building management
02
03
Building management
Property

Floor	Name	Height
Roof	Roof	0
1	1F	3000

Floor	Name	Height
Roof	Roof	0
7	7F	3000
6	6F	3000
5	5F	3000
4	4F	3000
3	3F	3000
2	2F	3000
1	1F	3000

Enter the ground floor and height

Automatic generation of the ground floor

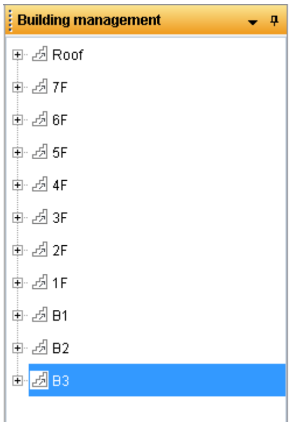

Building management
04
-3
05
Building management
Property

Floor	Name	Height
Roof	Roof	0
7	7F	3000
6	6F	3000
5	5F	3000
4	4F	3000
3	3F	3000
2	2F	3000
1	1F	3000

Floor	Name	Height
Roof	Roof	0
7	7F	3000
6	6F	3000
5	5F	3000
4	4F	3000
3	3F	3000
2	2F	3000
1	1F	3000
-1	B1	
-2	B2	
-3	B3	

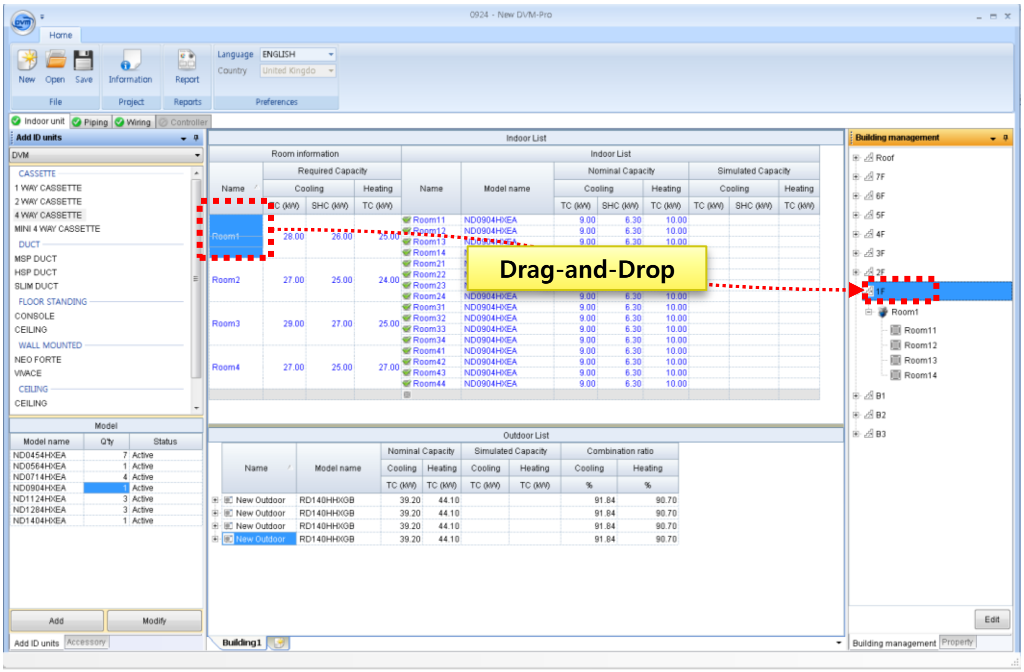
Enter the basement and height

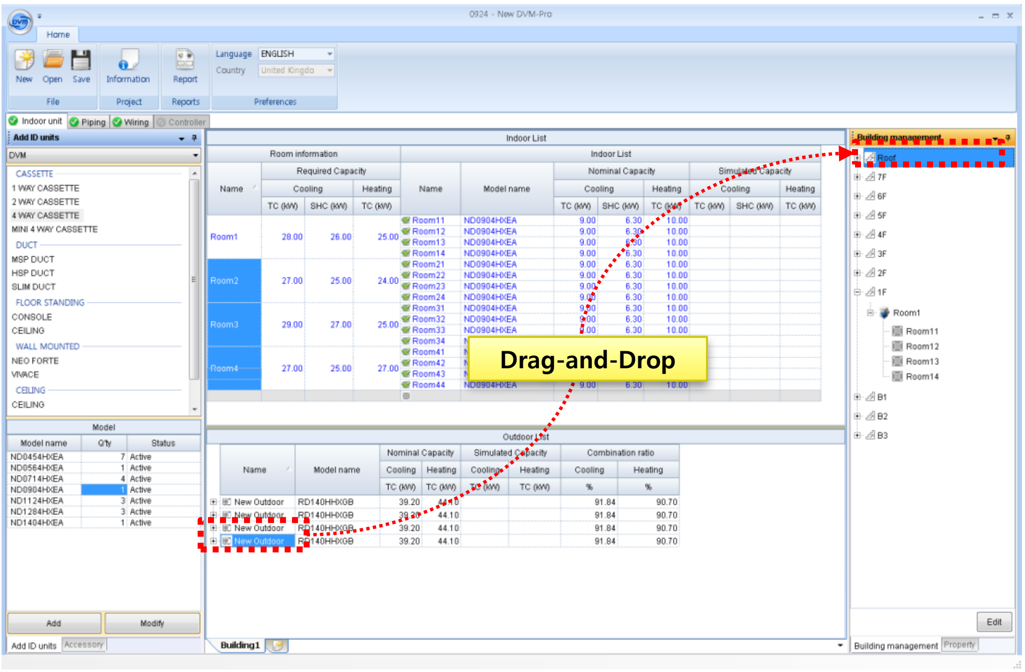
Automatic generation of the basement


Building management
Roof
7F
6F
5F
4F
3F
2F
1F
B1
B2
B3

(4) Space management

- Rooms can be registered to floors. Select indoor unit, room or outdoor unit and by drag and drop to the desired floor, registration is complete.





Model name	Q'ty	Status
ND0454HXEA	7	Active
ND0564HXEA	1	Active
ND0714HXEA	4	Active
ND0904HXEA	1	Active
ND1124HXEA	3	Active
ND1284HXEA	3	Active
ND1404HXEA	1	Active

Indoor List

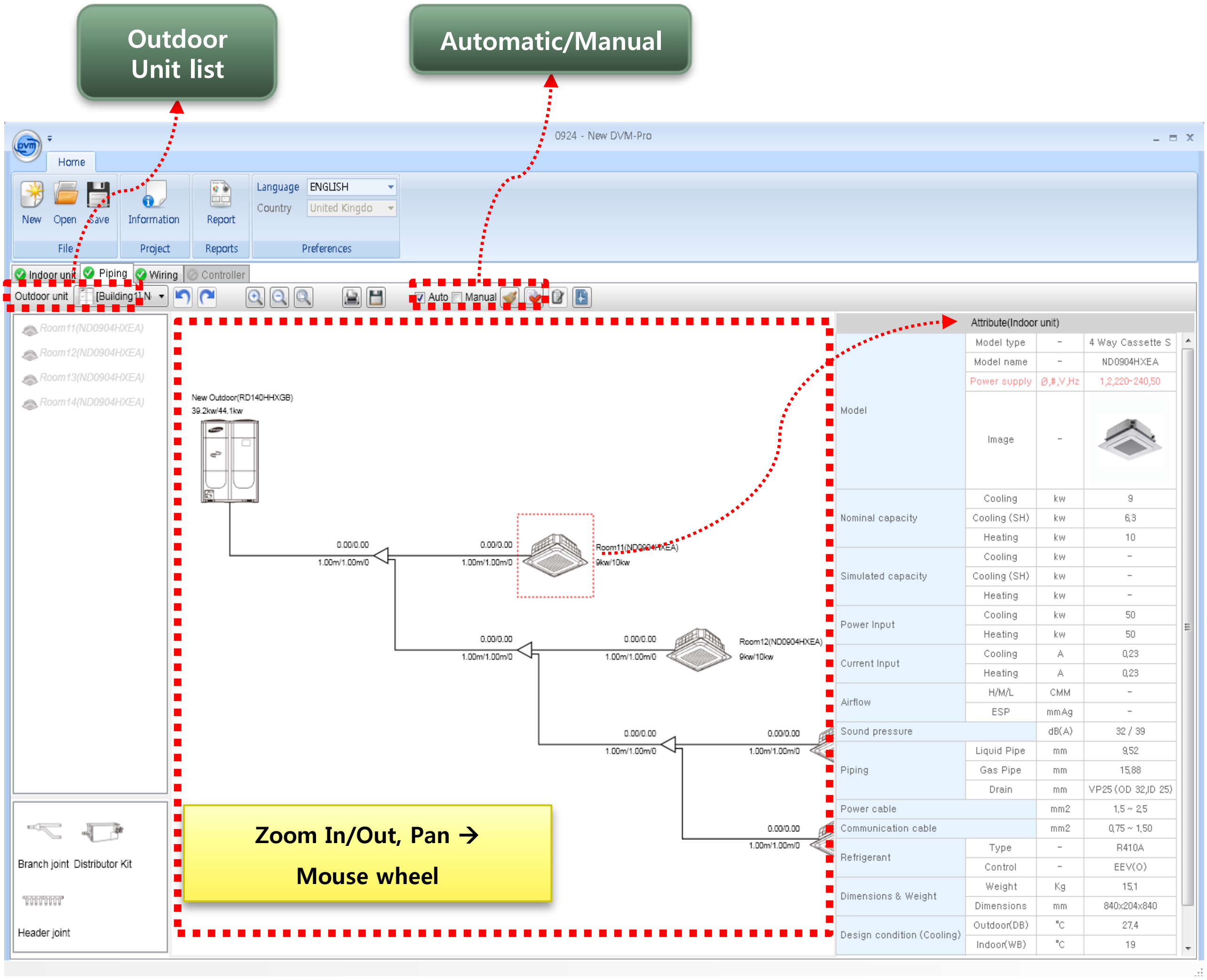
Room information				Indoor List							
	Required Capacity					Nominal Capacity			Simulated Capacity		
Name	Cooling		Heating	Name	Model name	Cooling		Heating	Cooling		Heating
	TC (kW)	SHC (kW)	TC (kW)			TC (kW)	SHC (kW)	TC (kW)	TC (kW)	SHC (kW)	TC (kW)
Room1	28.00	26.00	25.00	Room11	ND0904HXEA	9.00	6.30	10.00			
				Room12	ND0904HXEA	9.00	6.30	10.00			
				Room13	ND0904HXEA	9.00	6.30	10.00			
				Room14	ND0904HXEA	9.00	6.30	10.00			
Room2	27.00	25.00	24.00	Room21	ND0904HXEA	9.00	6.30	10.00			
				Room22	ND0904HXEA	9.00	6.30	10.00			
				Room23	ND0904HXEA	9.00	6.30	10.00			
				Room24	ND0904HXEA	9.00	6.30	10.00			
Room3	29.00	27.00	25.00	Room31	ND0904HXEA	9.00	6.30	10.00			
				Room32	ND0904HXEA	9.00	6.30	10.00			
				Room33	ND0904HXEA	9.00	6.30	10.00			
				Room34	ND0904HXEA	9.00	6.30	10.00			
Room4	27.00	25.00	27.00	Room41	ND0904HXEA	9.00	6.30	10.00			
				Room42	ND0904HXEA	9.00	6.30	10.00			
				Room43	ND0904HXEA	9.00	6.30	10.00			
				Room44	ND0904HXEA	9.00	6.30	10.00			

Outdoor List

		Nominal Capacity		Simulated Capacity		Combination ratio	
Name	Model name	Cooling	Heating	Cooling	Heating	Cooling	Heating
		TC (kW)	TC (kW)	TC (kW)	TC (kW)	%	%
New Outdoor	RD140HHXGB	39.20	44.10			91.84	90.70
New Outdoor	RD140HHXGB	39.20	44.10			91.84	90.70
New Outdoor	RD140HHXGB	39.20	44.10			91.84	90.70
New Outdoor	RD140HHXGB	39.20	44.10			91.84	90.70

(5) Piping – Automatic

- After registration of the indoor and outdoor unit is complete, the piping tab is activated, the user will be able to write.
- The default mode is auto-piping, the user can manually direct if needed,.
- Like the CAD, the user can use the mouse wheel to zoom in / out, and pan.


0924 - New DVM-Pro
Home
New
Open
Save
File
Information
Project
Report
Reports
Language
ENGLISH
Country
United Kingdo
Preferences
Indoor unit
Piping
Wiring
Controller
Outdoor unit
[Building1] N
Auto
Manual
Room11(ND0904HXEA)
Room12(ND0904HXEA)
Room13(ND0904HXEA)
Room14(ND0904HXEA)
New Outdoor(RD140HHXGB)
39.2kw/44.1kw
0.00/0.00
1.00m/1.00m/0
Room11(ND0904HXEA)
9kw/10kw
Room12(ND0904HXEA)
9kw/10kw
Branch joint
Distributor Kit
Header joint

Outdoor Unit list

Automatic/Manual

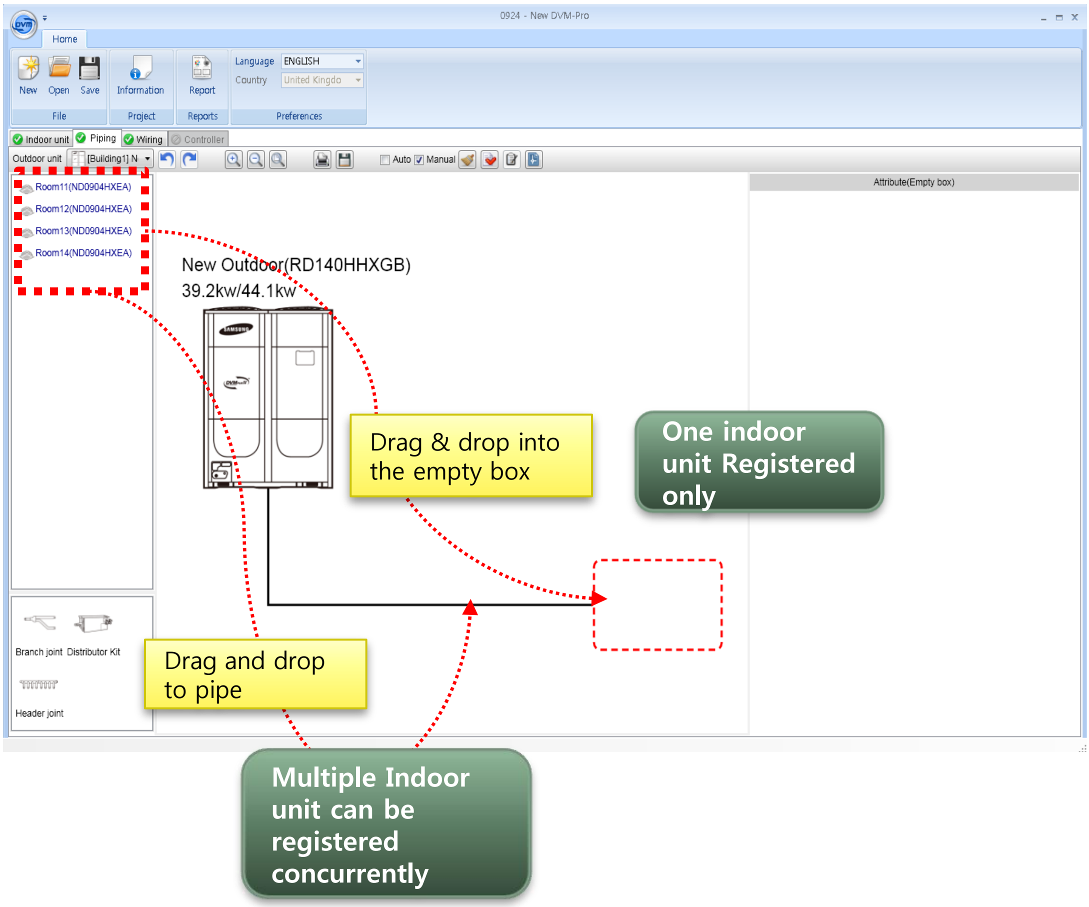
Zoom In/Out, Pan → Mouse wheel

Attribute(Indoor unit)

Model	Model type	-	4 Way Cassette S
	Model name	-	ND0904HXEA
	Power supply	Ø,#,V,Hz	1,2,220-240,50
	Image	-	
Nominal capacity	Cooling	kw	9
	Cooling (SH)	kw	6,3
	Heating	kw	10
Simulated capacity	Cooling	kw	-
	Cooling (SH)	kw	-
	Heating	kw	-
Power Input	Cooling	kw	50
	Heating	kw	50
Current Input	Cooling	A	0,23
	Heating	A	0,23
Airflow	H/M/L	CMM	-
	ESP	mmAg	-
Sound pressure		dB(A)	32 / 39
Piping	Liquid Pipe	mm	9,52
	Gas Pipe	mm	15,88
	Drain	mm	VP25 (OD 32,ID 25)
Power cable		mm2	1,5 ~ 2,5
Communication cable		mm2	0,75 ~ 1,50
Refrigerant	Type	-	R410A
	Control	-	EEV(O)
Dimensions & Weight	Weight	Kg	15,1
	Dimensions	mm	840x204x840
Design condition (Cooling)	Outdoor(DB)	°C	27,4
	Indoor(WB)	°C	19

(5) Piping – manual

- When you select manual, a list of indoor units connected to the selected outdoor unit is shown.
- Drag-and-drop placement is possible and automatic Y-joint setting can be made depending on the situation.
- Depending on your needs EEV Kit or Header can also be used.

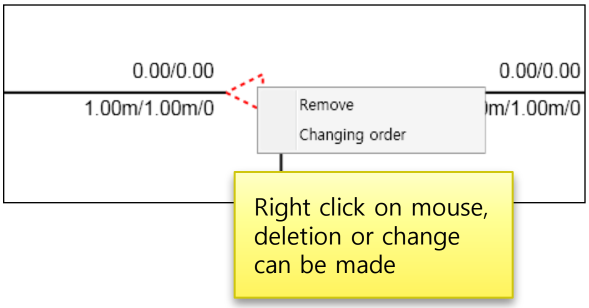

0924 - New DVM-Pro
Home
New
Open
Save
File
Information
Project
Report
Reports
Language
ENGLISH
Country
United Kingdo
Preferences
Indoor unit
Piping
Wiring
Controller
Outdoor unit
[Building1] N
Auto
Manual
Attribute(Empty box)
Room11(ND0904HXEA)
Room12(ND0904HXEA)
Room13(ND0904HXEA)
Room14(ND0904HXEA)
New Outdoor(RD140HHXGB)
39.2kw/44.1kw
Branch joint
Distributor Kit
Header joint

Drag & drop into the empty box

One indoor unit Registered only

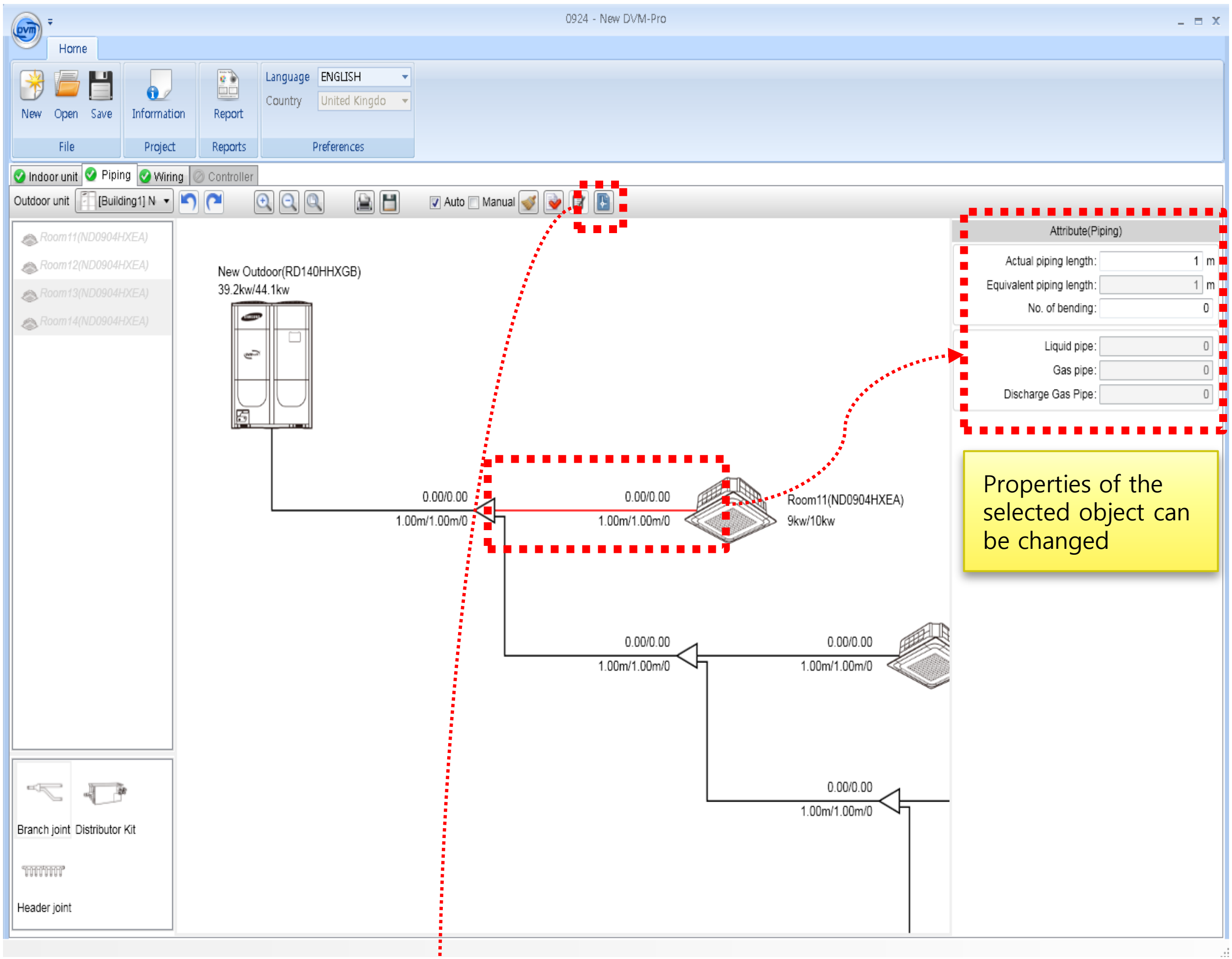
Drag and drop to pipe

Multiple Indoor unit can be registered concurrently


0.00/0.00
1.00m/1.00m/0
0.00/0.00
)m/1.00m/0
Remove
Changing order

Right click on mouse, deletion or change can be made

(5) Piping – manual


0924 - New DVM-Pro
Home
New
Open
Save
File
Information
Project
Report
Reports
Preferences
Indoor unit
Piping
Wiring
Controller
Outdoor unit
[Building1] N
Auto
Manual
Room11(ND0904HXEA)
Room12(ND0904HXEA)
Room13(ND0904HXEA)
Room14(ND0904HXEA)
Branch joint
Distributor Kit
Header joint
New Outdoor(RD140HHXGB)
39.2kw/44.1kw
0.00/0.00
1.00m/1.00m/0
Room11(ND0904HXEA)
9kw/10kw
Attribute(Piping)

Language ENGLISH

Country United Kingdo

☑ Auto ☐ Manual

Attribute(Piping)

Actual piping length: 1 m

Equivalent piping length: 1 m

No. of bending: 0

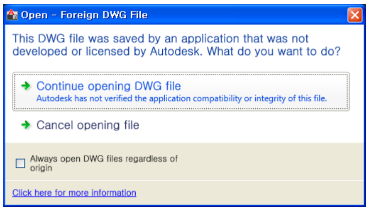
Liquid pipe: 0

Gas pipe: 0

Discharge Gas Pipe: 0

Properties of the selected object can be changed

- Piping schema can be outputted by AutoCAD files
- This is not made by AutoCAD files so the following message appears and is normal



Open – Foreign DWG File

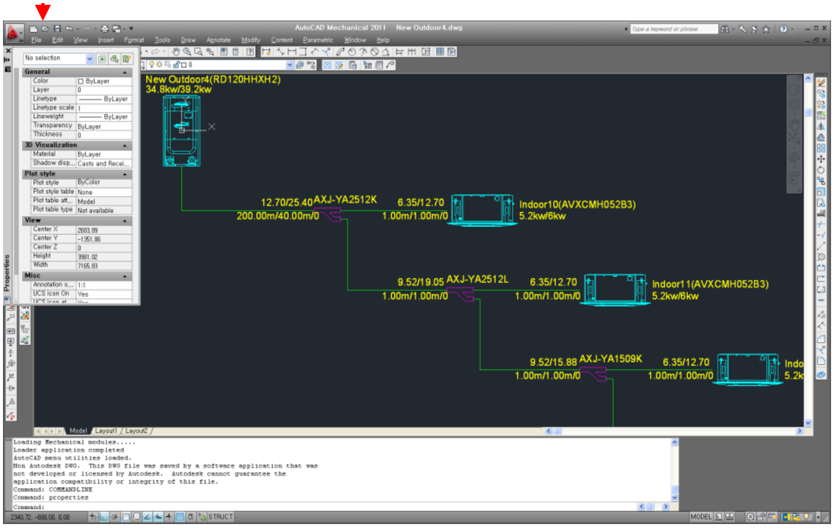
This DWG file was saved by an application that was not developed or licensed by Autodesk. What do you want to do?

→ Continue opening DWG file
Autodesk has not verified the application compatibility or integrity of this file.

→ Cancel opening file

☐ Always open DWG files regardless of origin

Click here for more information

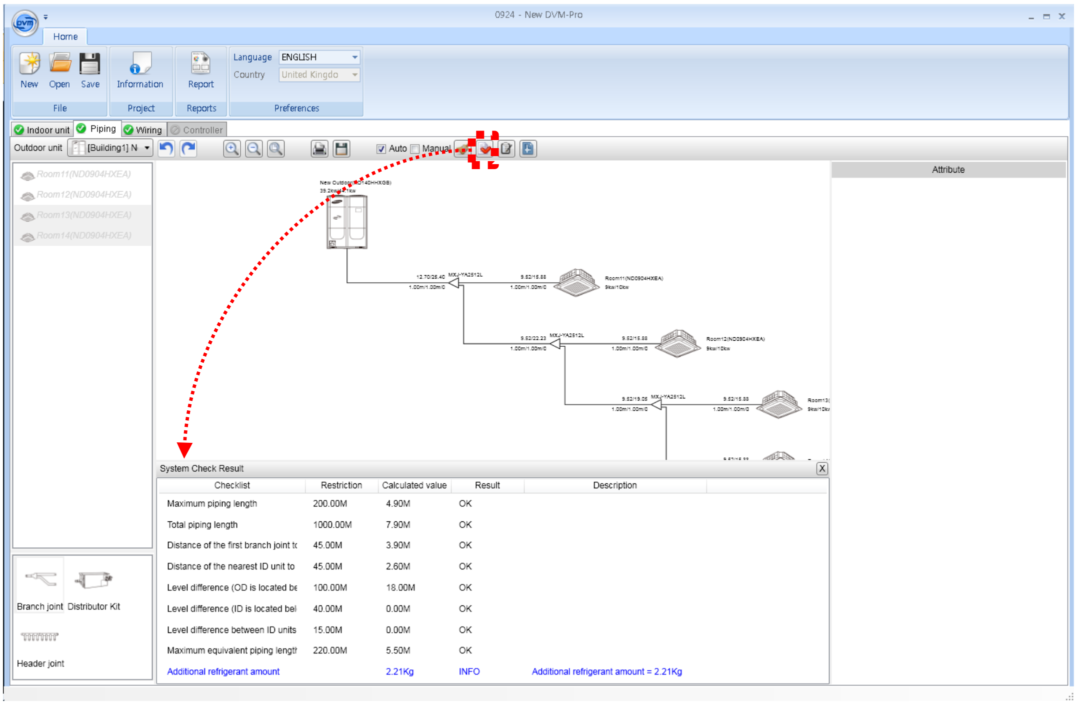

AutoCAD Mechanical 2011 New Outdoor4.dwg
New Outdoor4(RD120HHXH2)
34.8kw/39.2kw
12.70/25.40 AXJ-YA2512K
200.00m/40.00m/0
6.35/12.70
1.00m/1.00m/0
Indoor10(AVXCMH052B3)
5.2kw/6kw
9.52/19.05 AXJ-YA2512L
Indoor11(AVXCMH052B3)
9.52/15.88 AXJ-YA1509K
Model
Layout1
Layout2
STRUCT

```
Loading Mechanical modules.....
Loader application completed
AutoCAD menu utilities loaded.
Non Autodesk DWG.  This DWG file was saved by a software application that was
not developed or licensed by Autodesk.  Autodesk cannot guarantee the
application compatibility or integrity of this file.
Command: COMMANDLINE
Command: properties
Command:
```

03 Operation Procedure

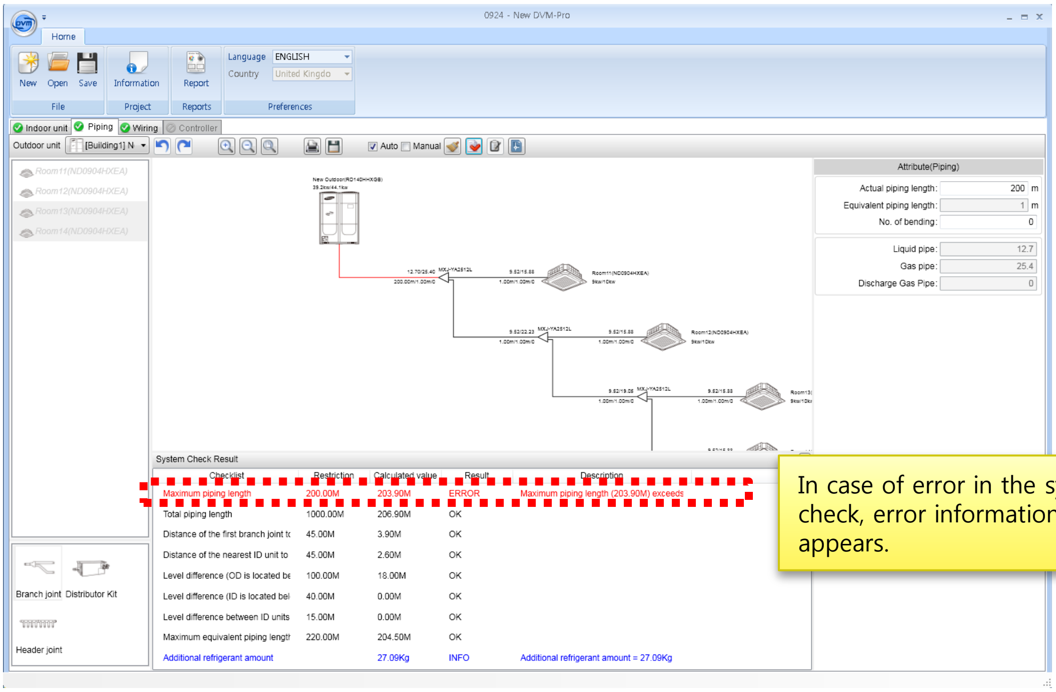
(6) System Check

- Once Piping system is complete, you can proceed with system check and the results are displayed on the bottom.
- If there is a problem in the system check, error description appears in red at the bottom. Modify errors and perform system check again.


0924 - New DVM-Pro
Home
New
Open
Save
Information
Report
File
Project
Reports
Preferences
Language ENGLISH
Country United Kingdo
Indoor unit
Piping
Wiring
Controller
Outdoor unit
[Building1] N
Auto
Manual
Attribute
Room11(ND0904HXEA)
Room12(ND0904HXEA)
Room13(ND0904HXEA)
Room14(ND0904HXEA)
Branch joint
Distributor Kit
Header joint
MXJ-YA2512L

System Check Result

Checklist	Restriction	Calculated value	Result	Description
Maximum piping length	200.00M	4.90M	OK	
Total piping length	1000.00M	7.90M	OK	
Distance of the first branch joint tc	45.00M	3.90M	OK	
Distance of the nearest ID unit to	45.00M	2.60M	OK	
Level difference (OD is located be	100.00M	18.00M	OK	
Level difference (ID is located bel	40.00M	0.00M	OK	
Level difference between ID units	15.00M	0.00M	OK	
Maximum equivalent piping lengtł	220.00M	5.50M	OK	
Additional refrigerant amount		2.21Kg	INFO	Additional refrigerant amount = 2.21Kg


0924 - New DVM-Pro
Home
New
Open
Save
Information
Report
File
Project
Reports
Preferences
Language ENGLISH
Country United Kingdo
Indoor unit
Piping
Wiring
Controller
Outdoor unit
[Building1] N
Auto
Manual
Room11(ND0904HXEA)
Room12(ND0904HXEA)
Room13(ND0904HXEA)
Room14(ND0904HXEA)
Branch joint
Distributor Kit
Header joint
MXJ-YA2512L

Attribute(Piping)

Actual piping length: 200 m
Equivalent piping length: 1 m
No. of bending: 0
Liquid pipe: 12.7
Gas pipe: 25.4
Discharge Gas Pipe: 0

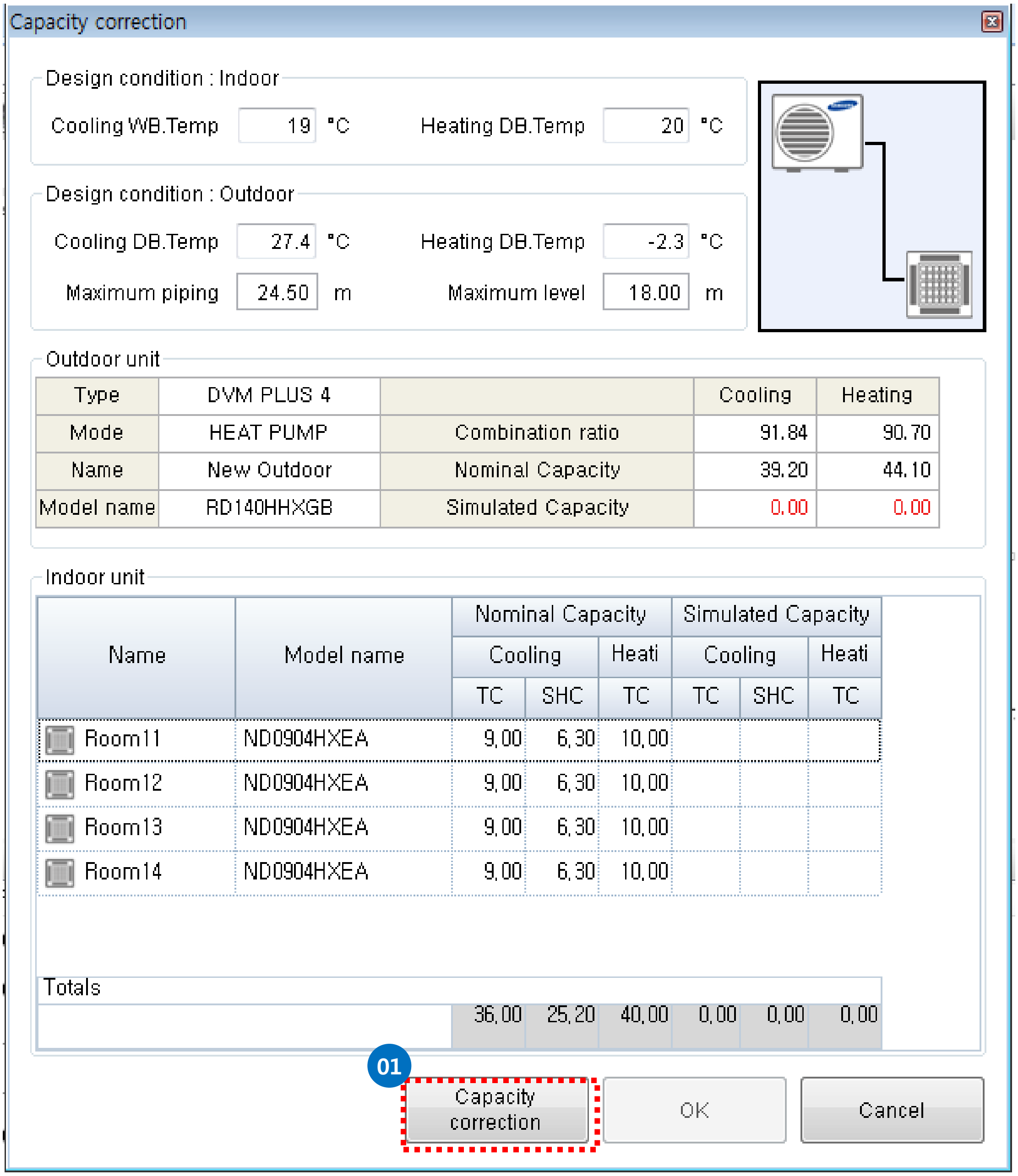
System Check Result

Checklist	Restriction	Calculated value	Result	Description
Maximum piping length	200.00M	203.90M	ERROR	Maximum piping length (203.90M) exceeds
Total piping length	1000.00M	206.90M	OK	
Distance of the first branch joint tc	45.00M	3.90M	OK	
Distance of the nearest ID unit to	45.00M	2.60M	OK	
Level difference (OD is located be	100.00M	18.00M	OK	
Level difference (ID is located bel	40.00M	0.00M	OK	
Level difference between ID units	15.00M	0.00M	OK	
Maximum equivalent piping lengtł	220.00M	204.50M	OK	
Additional refrigerant amount		27.09Kg	INFO	Additional refrigerant amount = 27.09Kg

In case of error in the system check, error information appears.

(7) Capacity Correction

- Capacity correction can be done after system check is completed.



Capacity correction

Design condition : Indoor

Cooling WB.Temp 19 °C Heating DB.Temp 20 °C

Design condition : Outdoor

Cooling DB.Temp 27.4 °C Heating DB.Temp -2.3 °C

Maximum piping 24.50 m Maximum level 18.00 m

Outdoor unit

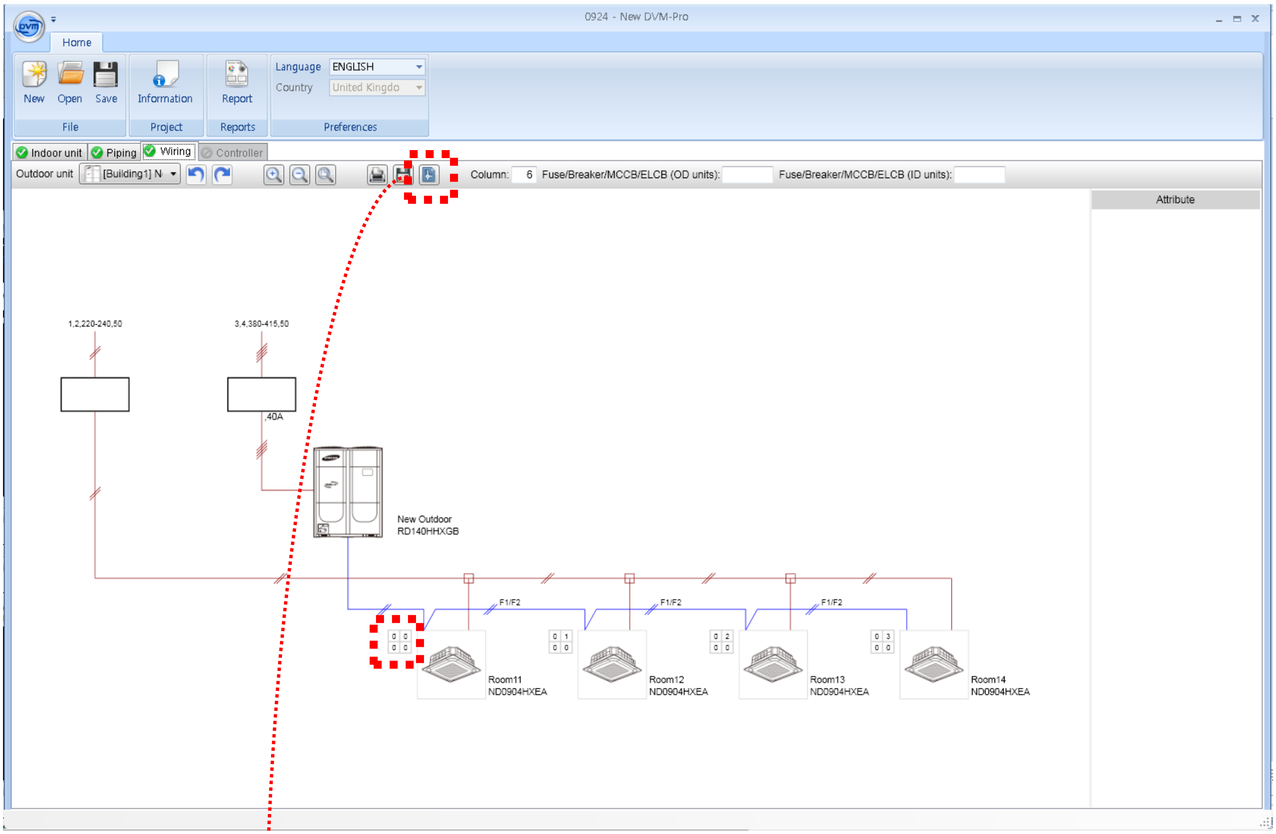
			Cooling	Heating
Type	DVM PLUS 4		Cooling	Heating
Mode	HEAT PUMP	Combination ratio	91.84	90.70
Name	New Outdoor	Nominal Capacity	39.20	44.10
Model name	RD140HHXGB	Simulated Capacity	0.00	0.00

Indoor unit

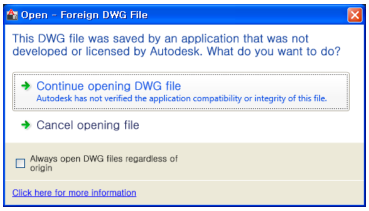
Name	Model name	Nominal Capacity			Simulated Capacity		
		Cooling		Heati	Cooling		Heati
		TC	SHC	TC	TC	SHC	TC
Room11	ND0904HXEA	9.00	6.30	10.00			
Room12	ND0904HXEA	9.00	6.30	10.00			
Room13	ND0904HXEA	9.00	6.30	10.00			
Room14	ND0904HXEA	9.00	6.30	10.00			
Totals		36.00	25.20	40.00	0.00	0.00	0.00

(8) Wiring Diagram

- Can manage RMC address, column number
- Like the CAD, the user can use the mouse wheel to zoom in / out, and pan.


0924 - New DVM-Pro
Home
New
Open
Save
File
Information
Project
Report
Reports
Language
ENGLISH
Country
United Kingdo
Preferences
Indoor unit
Piping
Wiring
Controller
Outdoor unit
[Building1] N
Column:
6
Fuse/Breaker/MCCB/ELCB (OD units):
Fuse/Breaker/MCCB/ELCB (ID units):
Attribute
1,2,220-240,50
3,4,380-415,50
,40A
New Outdoor
RD140HHXGB
F1/F2
Room11
ND0904HXEA
Room12
ND0904HXEA
Room13
ND0904HXEA
Room14
ND0904HXEA

- Wiring schema can be outputted by AutoCAD files
- This is not made by AutoCAD files so the following message appears and is normal


Open - Foreign DWG File

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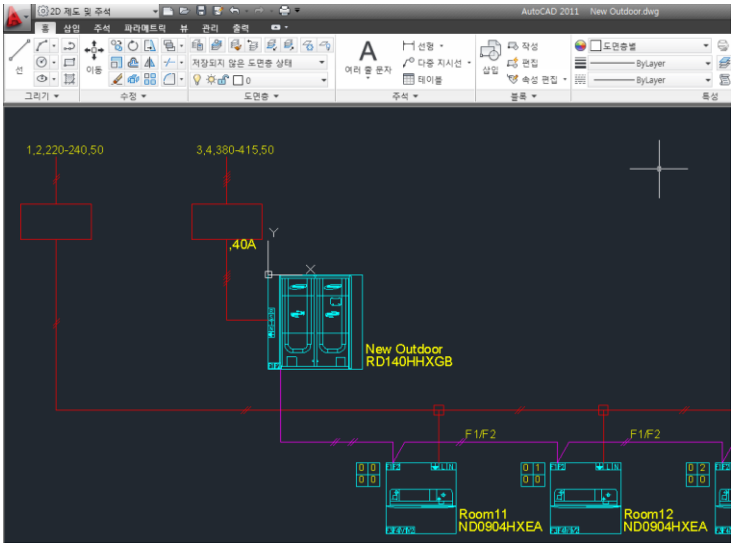
→ Cancel opening file

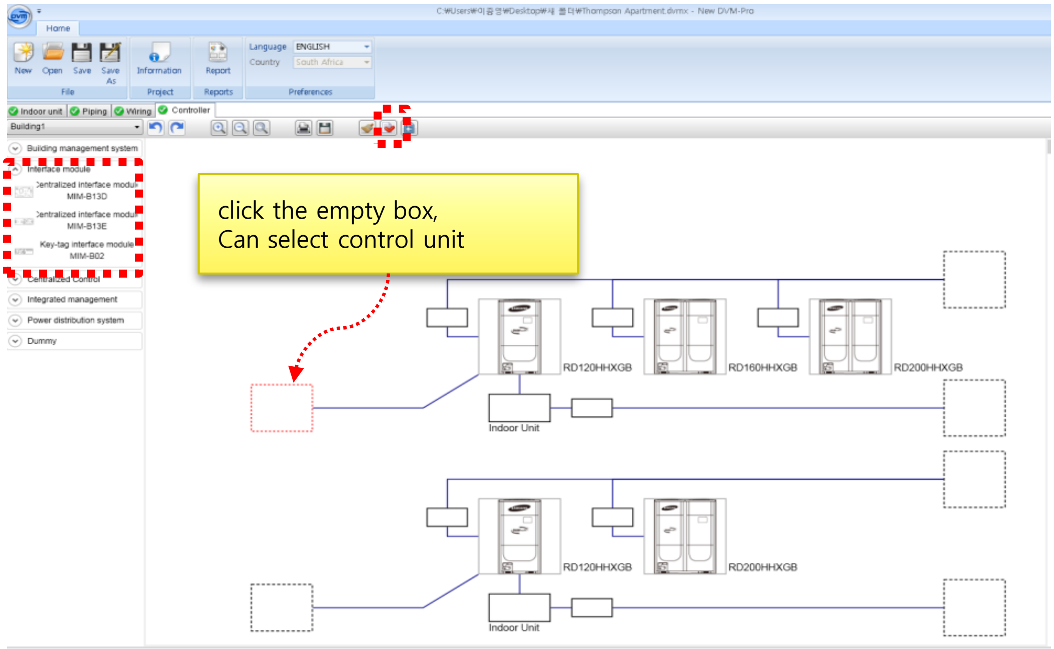
☐ Always open DWG files regardless of origin

Click here for more information


AutoCAD 2011 New Outdoor.dwg
1,2,220-240,50
3,4,380-415,50
,40A
New Outdoor
RD140HHXGB
F1/F2
F1/F2
Room11
ND0904HXEA
Room12
ND0904HXEA

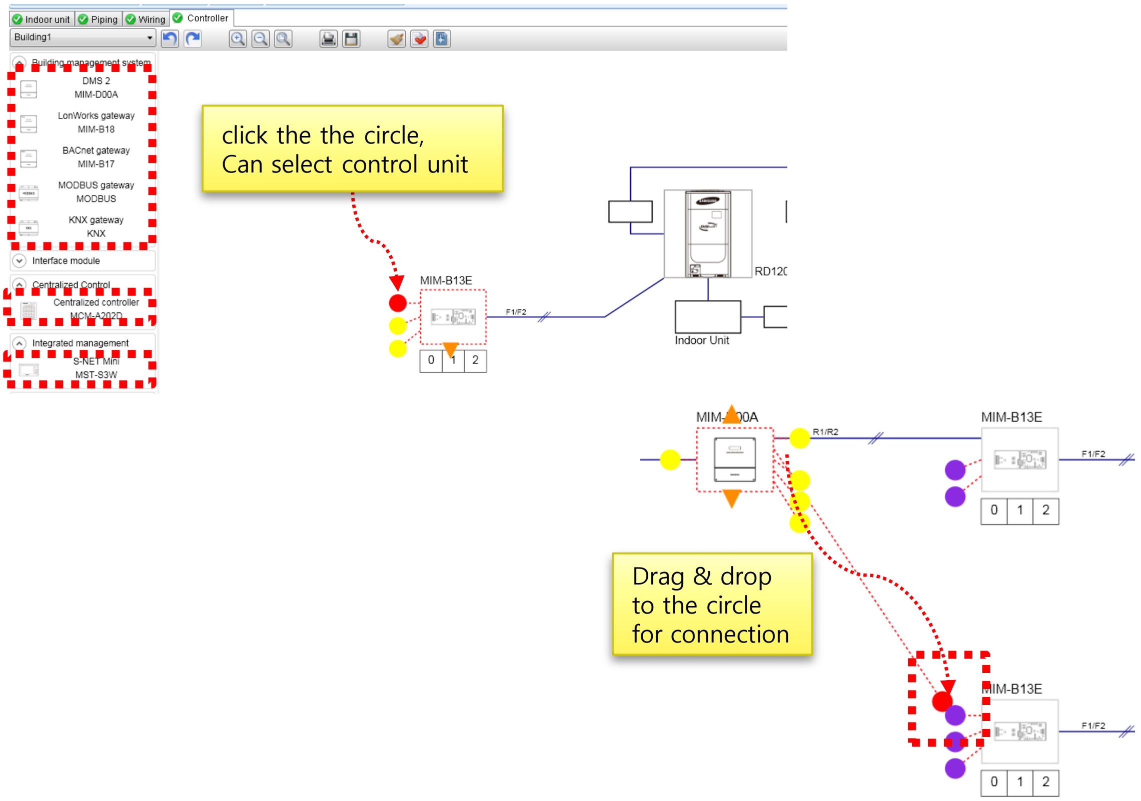
(9) Control System Selection

- Control system management
- If there is a problem in the system check, error description appears in red at the bottom. Modify errors and perform system check again.



click the empty box,
Can select control unit

Home
New
Open
Save
Save As
File
Information
Project
Report
Reports
Language ENGLISH
Country South Africa
Preferences
Indoor unit
Piping
Wiring
Controller
Building1
Building management system
Interface module
Centralized interface module MIM-B13D
Centralized interface module MIM-B13E
Key-tag interface module MIM-B02
Centralized Control
Integrated management
Power distribution system
Dummy
RD120HHXGB
RD160HHXGB
RD200HHXGB
Indoor Unit
RD120HHXGB
RD200HHXGB
Indoor Unit

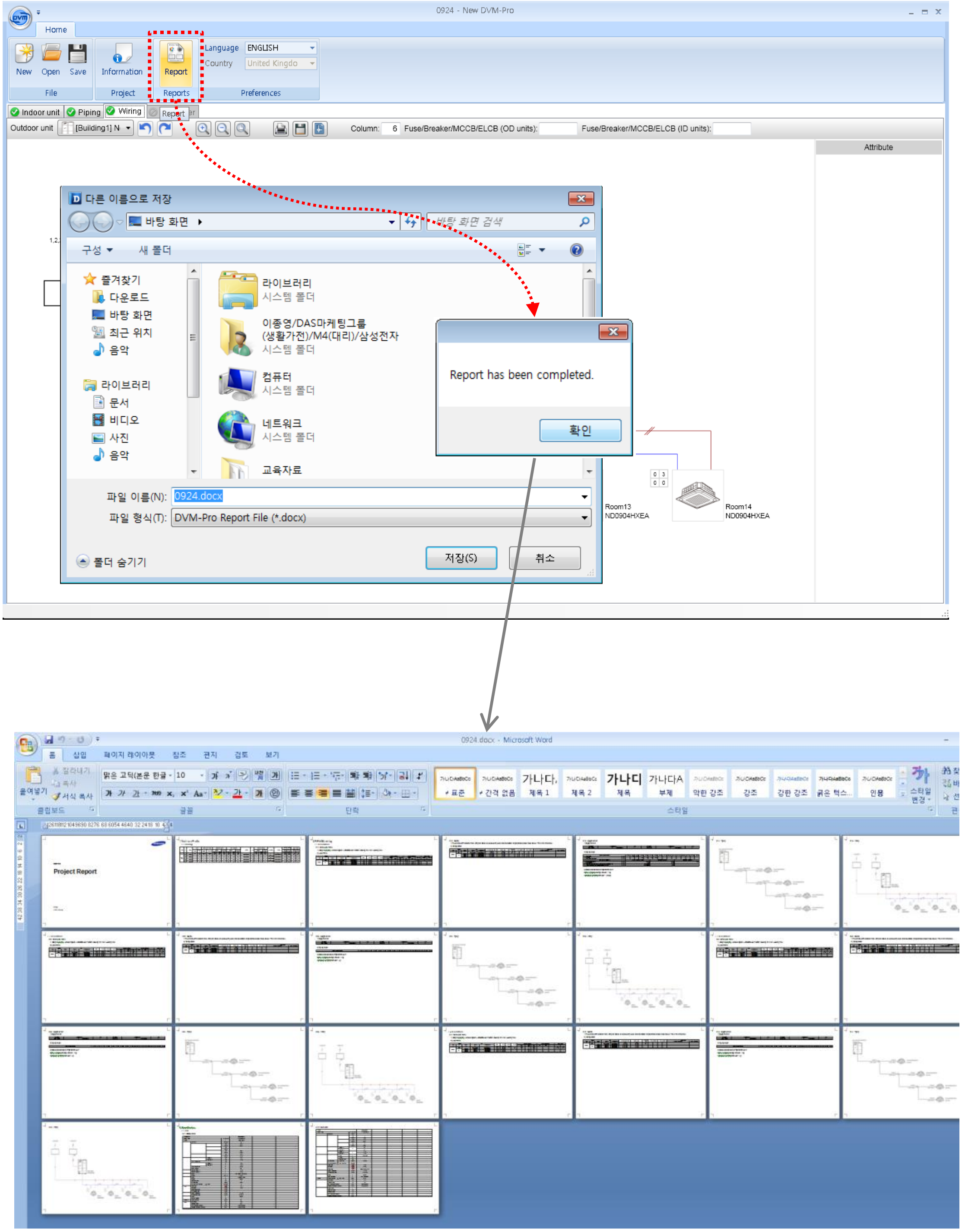


click the the circle,
Can select control unit

Drag & drop
to the circle
for connection

Indoor unit
Piping
Wiring
Controller
Building1
Building management system
DMS 2
MIM-D00A
LonWorks gateway
MIM-B18
BACnet gateway
MIM-B17
MODBUS gateway
MODBUS
KNX gateway
KNX
Interface module
Centralized Control
Centralized controller
MCM-A202D
Integrated management
S-NET Mini
MST-S3W
MIM-B13E
F1/F2
0
1
2
RD120
Indoor Unit
MIM-D00A
R1/R2
MIM-B13E
F1/F2
0
1
2
MIM-B13E
F1/F2
0
1
2

- Report



Language: ENGLISH

Country: United Kingdo

Column: 6

파일 이름(N): 0924.docx

파일 형식(T): DVM-Pro Report File (*.docx)

Report has been completed.

0924 - New DVM-Pro
Home
New
Open
Save
File
Information
Project
Report
Reports
Preferences
Indoor unit
Piping
Wiring
Report
Outdoor unit
[Building1] N
Fuse/Breaker/MCCB/ELCB (OD units):
Fuse/Breaker/MCCB/ELCB (ID units):
Attribute
다른 이름으로 저장
바탕 화면
바탕 화면 검색
구성
새 폴더
즐겨찾기
다운로드
바탕 화면
최근 위치
음악
라이브러리
문서
비디오
사진
음악
라이브러리
시스템 폴더
이종영/DAS마케팅그룹(생활가전)/M4(대리)/삼성전자
시스템 폴더
컴퓨터
시스템 폴더
네트워크
시스템 폴더
교육자료
폴더 숨기기
저장(S)
취소
확인
Room13
ND0904HXEA
Room14
ND0904HXEA
0924.docx - Microsoft Word
Project Report