# 9. Server-Mode Deployment – Remote Manager DB Server

## INTRODUCTION

"Remote Manager" used to be a standalone Windows/Mac application that enables system

administrators to manage multiple NovoConnect devices from a single PC, making it ideal for corporations, schools or other institutions. As a matter of fact, it is widely used by the IT administrators of various organizations.

Remote Manager takes a step further by introducing two operation modes

1) **Standalone Mode**. In this mode, software works the same way as the "old" Remote Manager.

2) Server Mode. This is used to deploy in server environment.

The new **Server Mode** brings along the following new capabilities.

- LDAP integration (such as Microsoft Active Directory (AD))
- SSO (Single Sign-On) support1
- Centralized NovoConnect device list

This leads to some key benefits for users

• Nowadays most organizations deploy LDAP service and enable SSO support. With tight integration of LDAP and SSO, Remote Manager v3.0 dramatically improves its deployment flexibility, security, and usage convenience.

 With NovoConnect device list stored in a central server, IT administrators no longer maintain

multiple copies of the device list in several computers. This leads to accuracy and efficiency.

This document describes how the **Server Mode** works, and how to set up the corresponding new services.

Note: For **Standalone Mode** operations, please refer to NovoConnect user's manual, see this <u>article</u>.

## **OVERALL DIAGRAM**

Remote Manager consists of two components

1) **Remote Manager software** (running on Windows and Mac PC) This is the front-end software which users will install on their personal computers and gain

access to Remote Manage DB Server.

As mentioned in previous section, this software component can run by itself (Standalone Mode) with the same functionalities as the "old" Remote Manager.

2) Remote Manager DB Server (running on Windows server)

This is the server program managing users and the NovoConnect device list.

The following diagram illustrates the overall picture.

• IT administrators set up accounts in "Remote Manager DB Server" for users who are assigned to manage NovoConnect devices.

• A user can choose to login in its LDAP server, and his/her credential will be validated by the organization's LDAP server.

• If SSO is chosen, his/her OS login credential will be used.

• Once the credential is validated, the user will be able to manage NovoConnect devices, like add, delete, change status, etc. Changes will be stored in **Remote Manage DB Server**.



#### SETUP - Remote Manager DB Server

**Step1.** Download and Install Remote Manager DB Server application on a server.



**Step2.** Once it is launched the very first time, the application asks you to create a Power User account who will be responsible for managing this DB server.

🛟 Rer	DB Server note Manager	Ŀ
Welcome! This is the fir Novo Backend Server Please create a Power Power User: Password: Comfirm Password:	st time using User account:	
	Create	

**Step3.** After creating the credential for the Power User, go to **Preference** for more configuration.

If you would like for users to log into Remote Manager DB Server as "AD users", toggle the **Enable AD Certification**. This will bring up three more settings.

No.	Item	Description
1	Server Port	Server Port indicates which port you want to communicated with. Select port 389 (simple bind/SASL bind for SSO/Single Sign On) or port 636 (TLS/SSL) for desired authentication methods.

2	Conver UDI	Server URL indicates the URL associated with your AD server. A protocol prefix ("ldap://" or "ldaps://") will be added automatically depending on the Server Port you choose.				
Z	Server UKL					
		• "ldap://" corresponds to server port 389				
		<ul> <li>"ldaps://" corresponds to server port 636</li> </ul>				
3	Base	Base indicates the LDAP querying base where a user MUST be located.				

Remote Manager	- 🗆 🛪
General Preference	V 1.1.0.42   2019 Delta Electronics, Inc. All Rights Reserved.
2	
Group List	DB Server Remote Manager
Name oup Devic	Service Controller V 1.1.0.42
Al Devices 0 This ground	Service Status Startup Type: Automatic  Running Service Configuration Listening Port: 8080  Server Port: 8080  Default port : 389  Ouefault port : 389  Server URL: Idap://deitaidap.deitaww.com (SSL login should be Idaps://) Base: OU=Service, OU=Users, OU=T (ex: ou=us,dc=example, dc=com)

**Step4.** Click **Ok** after all settings are done, and then the application will restart to apply the changes.



jin.hsua

jin879

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Local User fsdaf

fsdafabbb

delta.employee

Local User

03B7D4E84FD965439B... AD Group

Step5. Once you log in as the Power User, go to General >
Manage User > to create accounts for other users.

*	Remote Man	erver lager					
Ge	eneral Preference	•					
	Manage User	0					
	Manage Device L	ist C					
		$\sim$					
	Group List					Device List	
	Name	oup Devic	De	scription		IP	Device ID
	All Devices	0	This group includes all devices				
1-11						_	
м	anage User						
	Add Add AD Group	Remove					
	Select User Name	/GUID Typ	Description	Authority	Attribut	te	
1	. 🗐 а	Local L	Jser adsfffee	Guest	2 0	8	

Add AD User: If you want to add an "AD User" who can log in as an AD Domain User via Remote Manager, check the "Microsoft

Administrator

Administrator

Administrator

Back

Active Directory User" and input GUID corresponding to this user on the AD Server.

Add AD Group: If an AD user belongs to an AD group, you can simply add that group and treat that user login by group identity without adding each user's GUID one by one. This function provides a convenient method to manage user accounts managed by the AD server.

Man	age Us	er			
Ad	ld A	dd AD G	🍅 Create User	<b></b>	
	Select	Us	Microsoft Active D	Directory User	Attribute
1		a iin.hsu:	GUID	BE 12 FD 29 7B 94 90 41 B7 F3	2 % 2 %
3		jin879	Description	Administrator 💌	2 08
4		03B7D		OK Cancel	2 %

#### SETUP - Remote Manager Software

**Step1.** Download and install **Remote Manager** software with the version v3.0 above.

Step2. Launch the application, go to Preference >under DB
Server section, toggle Enable Backend Server Data Exchange.

**Step3.** Enter **IP address** and **port number** of Remote Manager DB Server (Backend Server). You can simply input "127.0.0.1" if the server is on the same machine with Remote Manager. Check the **Login as current user** box if you use SSO login.

Device C Firmware Ur	date		Live Hub	Preference	0						V3.1.8.387
	dutt			Tererence	Im						1012101007
All Devices (1/15		🗘 Ref	resh Total: 15	( \varTheta 1 🧲	جر کے				Se	earch	of 🗊 🖉
Unassigned Devices (1/15	)		Device Nan	ie –	IP Address	Group	Activity	Dev	ice Type	Firmware Version	WI-FI Mac Addres
	1	θ	Novo-FDDF1	19	2.168.43.151		Offline				
Group List: V	2	0	Novo-02D69	👌 Syste	m Preferences			×			
	3	$\Theta$	Novo-1A017	Langua	age						
	4	0	Novo-DB132	Englis	English 🗢 Set						
	5	0	Novo-17E54	Remot	e Manager						
	6	0	Novo-4CBC0 Port Number: 20142 CR			Reset					
	7	0	Novo-1EE52	Au	ito IP Correction by I	Device Discovery					
	8	0	Novo-57FE7	DB Ser	ver						
	9	0	Novo-5513F	IP	able DB Server	2.16.5.6					
	10	0	Novo-75858	Po	rt Number: 80	80 🌲 (Default port : 80	80)				
	11		Novo-C720F		Login as current us	er				v2.7.2	04:E6:76:D9:FA:B8
	12	0	Novo-6CE20				OK	Cancel			
	13	0	Novo-E4637	19	2.100.1.193						
	14	0	Novo-786DD	19	2.168.1.102		Offline				
	15	0	Novo-89244	19	2.168.1.242		Offline				
	(T										

**Step4.** Restart the application and then the login page shows up. Enter your login credential to continue.

If you want to change server settings, click **Setting** option to do so.

<b>Vsername:</b>	P
Password:	
Login as current user Settings	
Backend Server IP          127.0       .0       .1         Backend Server Port       8080       •         Image: Constraint of the server       Image: Constraint of the server       Image: Constraint of the server	

**Step5.** Once you log in successfully, you should see the following main screen, which has a slightly different look

from the "Standalone Mode" Remote Manager.

👌 <b>Remote</b> Manager	٢							- • ×
C Device Firmware Updat	te 🛛 🛤 NT Live Hub	😳 Preferences						V3.1.8.387
						V DB Serve	r Access Mode   Use	r Name : Admin
All Devices	Online 0/Offline 0							
Unassigned Devices	ID	IP Address	WIFI Mac Address	LAN Mac Address	Device Name	Firmware Version	Group	
+ Group								
Multi Selection								
	<u>a</u>							
	•							•