Remote Manager V3.0 Server-Mode Deployment

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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 V3.0 takes a step further by introducing two operation modes

- 1) **Standalone Mode**. In this mode, V3.0 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.

¹ SSO only works for Windows computers at this point.

OVERALL DIAGRAM

Remote Manager V3.0 consists of two components

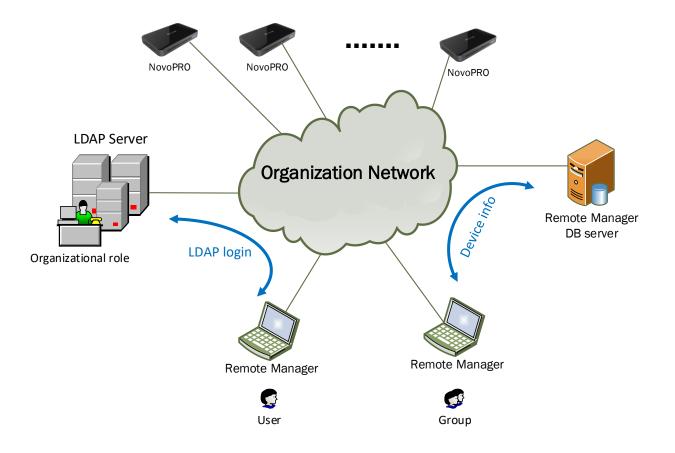
- 1) Remote Manager software (running on Windows and Mac PC)
 - This is the front-end software which users will install on their personal computers and gain access to Remote Manage DB Server.

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

1) Download and Install Remote Manager DB Server application on a server.



2) 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.

| | Đ |
|---|---|
| Welcome! This is the first time using | |
| Novo Backend Server Please create a Power User account: Power User: | |
| Password: | |
| Create | |

3) After creating the credential for the Power User, you can open the "Preference" dialog for more configuration.

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

- a) **[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.
- b) **[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.
 - "Idap://" corresponds to server port 389
 - "Idaps://" corresponds to server port 636
- c) [Base] indicates the LDAP querying base where a user MUST be located.

| General Preference V1.0.1.1 2017 Delta Electronics, Inc. All Rights Reserved. Freference Inguage In Browne Croup Devices In Devices 0 Port Number: 8080 € Microsoft Active Directory Authentication Server DRI: 10 (Default port: 389) Server DRI: 39 • (Default port: 389) Server URL: (daps://deltaldap.edltaww.com) Sts. Login should be ldaps:// Base: 0 (Lindut a deradelta decaroon) | DB Server Contract of the server Contract of | × |
|--|---|----|
| Croup Lit Language Description Name Group Devices ① The rot Al Devices ① The rot ① Uistening Port Port Number: 8080 ÷ ① Microsoft Active Directory Authentication ✓ Enable AD Certification Server Port: 399 * (Default port : 389) 1 Server Port: 399 * (Default port : 389) 2 | General Preference V 1.0.1.14 2017 Delta Electronics, Inc. All Rights Reserve | d. |
| | Croup List Language Description N Devices 0 This grad Language Listening Port Port Number: 2000 Microsoft Active Directory Authentication Server Port: 389 (Default port : 389) Server Port: 389 (Default port : 389) Server Port: 389 (Default port : 389) Server URL: Idaps://defaulta/ap.deltaww.com (SSL login should be Idaps://) Base: OU=Deta, dc=deta, dc=corp (SSL login should be Idaps://) | |

4) Click "Ok" after all settings are done, and then the application will restart to apply the changes.

| 🏠 Novo | oBackendServer X |
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| | You must restart the program to apply these changes. |
| | OK Cancel |

5) Once you log in as the Power User, select "Manage User" from "General" menu, which allow you to create accounts for other users.

| \$ | Remote Mai | Server nager | | | | | | | □ × |
|------|----------------------------------|-----------------|---------------------------------|-------------|-----------|-------------|---------------------|---------------------------------------|----------|
| Gene | eral Preference | | | | | | V 1.0.1.14 2017 [| Delta Electronics, Inc. All Rights Re | eserved. |
| | Manage User Manage Device Lis | t | | | | | | | |
| | Group List | | | Device List | | | | | |
| | Name | roup Device | Description | IP | Device ID | Device Name | Device Type | Description | |
| | All Devices | 0 | This group includes all devices | | | | | | |
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| DB Server Remote Manager | | | | | | | | | * |
|-----------------------------|-----|--------|---|--|---|--|------|--|--|
| General Preference | | | | | | | V 1. | 0.1.14 2 | 2017 Delta Electronics, Inc. All Rights Reserved |
| | Add | Select | r d AD Group Remove User Name/GUID a jin.hsua jin879 0387D4E84FD9654398 | Type Local User Local User Local User AD Group | Description adsfffee fsdaf fsdafabbb delta.employee | Authority Guest Administrator Administrator | Att | rrbute of of of of of of of of of of | Description |
| | | | | | | | | Back | |

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

| General Preference V 1.0.1.14 2017 Delta Electronics, Inc. All Rights F | |
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| | served. |
| Group List Add AD G Create User Description | |
| Al Deriver 0 The provide Select Us 1 a 2 jin.hsu 3 jin879 4 03870 Select Us 1 a 2 jin.hsu 4 03870 Select Us 1 a 2 jin.hsu 4 03870 Select Us 1 a 2 jin.hsu 4 03870 Select Us 2 Microsoft Active Directory User GUID BE 12 FD 29 7B 94 90 41 87 F3 Description testuser Authority Administrator ~ | |
| Back | |

b) **[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.

| DB Server. Remote Manager | | |
|--|---|--|
| General Preference | | V 1.0.1.14 2017 Delta Electronics, Inc. All Rights Reserved. |
| General Preference Group List All Device 0 This grou | Add Add AD G Add AD Group Select U GUID 48 9D 0D 91 42 E6 59 48 93 55 2 jin.hsu Description testgroup 3 BE12Fi Authority Administrator • 4 jin879 OK Cancel | |
| | | Back |

SETUP – REMOTE MANAGER SOFTWARE

- 1) Download and install "Remote Manager" software with the version v3.0 above.
- 2) Launch the application and open the "Preference" dialog.
 - a) Please check the "Enable Backend Server Data Exchange"
 - b) 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.
 - c) Check the "Login as current user" box if you use SSO login

| 눦 Remote Manager | | | 0 | | , | | 0 | | | | |
|---------------------------|-----|-----|-----------------------|---|---------------------------------|-----------------|------------|----------|-----------------|--------------------------------|------------------|
| + Device 📋 Device Discove | ery | Ð | Firmware Update 🔣 | Preferences | _ | _ | V 2.4.0 | .999 | © 2016 Delta El | lectronics, Inc. All Rights Re | served. |
| All Devices (7) | 1 | Q P | Refresh Online 0/Offi | ne 7 | | | H E | lome Scr | een Config 🛛 🙎 | Set Moderator 🔗 💼 | Ø |
| Unassigned Devices (3) | - | | ID | IP Address | WIFI Mac Address | LAN Mac Address | Device Na | me | Firmware Vers | | |
| | | | Novo-5801DED2A | 192.168.0.22 | | | Novo-DED2A | | | 123 fdsafads x0000 | fasdfadsf |
| Group List: + Group | | 0 | Device 1 | 192.178.20.2 | | | | | | 123 | ffjkj;; |
| Multi Selection | 3 | 0 | | 😓 System Preferences | | | × | | | | 2222222 |
| | 4 | • | Novo-91166F502 | Language | | | | -6F5 | | | jk i ;ili |
| ÷ fdsafads (2) | 5 | - | Novo-9A500C5F2 | English 🗘 | Set | | | | | | |
| ÷ x0000000011 (2) | 6 | - | Novo-91166F502 | Remote Manager | | | | -6F5 | | 123 | jkl;jasf |
| ÷asdfasdfee (2) | 7 | 9 | Device 3 | Port Number: 20142 | Reset | | | _ | | 123 fdsafads xxxxx | fdsafas |
| | | | | Backend Server ✓ Enable Backend Ser Server IP: 172.1 Server Port: 8080 ☐ Login as current | 6 .5 .6 (Default port : 8080 | | DK Cancel | | | | |
| | • | | | | 111 | | | | | | Þ |

3) Restart the application and then the login page shows up. Enter your login credential to continue.a) If you want to change server settings, click "Setting" option to do so.

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4) Once you log in successfully, you should see the following main screen, which has a slightly different look from the "**Standalone Mode**" Remote Manager.

| 👌 Remote Manager | | | | | | | - | — × |
|-----------------------------|--------------------|--------------|------------------|-----------------|-------------|---------------------------|------------------------------|------------|
| + Device 🖄 Device Discovery | | Direferences | | | V 3.0.0 |).168 © 2017 Delta Elec | tronics, Inc. All Rights Res | served. |
| | | | | | | V DB Server Acc | cess Mode User 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 | | | | | | | | |
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