Link Admin Utility Manual

This document list instructions to change settings for various Link features using Link Admin Utility program

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Setup SMTP server for data emailing

Correct SMTP server setup is required for data emailing.

- 1. Start "Link Client"
- 2. Click Help -> Admin Utility to start Link Admin Utility

| 👛 Alarm Notifica | tion | | |
|------------------|------|----------------------|----|
| Connect View | Help | | |
| Dashboard | (| Configuration Folder | fr |
| | | General Settings | ł |
| 强 Alarm Stati | , | Admin Utility | (|
| Reports | , | About | |
| | | Offline: | 1 |

3. Click on "Email Settings" tab.

| Link Admin Utility |
|--------------------|
| Alarms |
| Email Settings |
| Reporting Service |
| Backup |
| Services |
| Maintenance |
| |

4. Enter Server address under **Host** and enter **Port number** Click Use **TLS/SSL** button only if SMTP server uses **SSL** otherwise leave it unchecked

| Server | |
|--------|------------------|
| Server | |
| Host | Port |
| | 25 📄 Use TLS/SSL |
| | |
| | |

Notice: Link version 4.0.1 only supports SSLv3, and does not support TLS. Most email hosting operations, such as those provided by Google, Microsoft, or Amazon, require TLS support. These providers are not currently supported by Link.

5. If SMTP server requires authentication, click "User Authentication" option and enter in **Username** and **Password**. Otherwise, select "No Authentication" option

| Authentication | |
|---|----------|
| ○ No Authentication | |
| User Authentication | |
| Username | Password |
| EditEmailUsername | |

6. Edit Retry period, Email Address and Sender Description if required. Then Click Save button

| 0 📄 Minutes | Emails that fail to send will be tried again after this time interval. | | | |
|-------------------------|--|--|--|--|
| Sender Email Address | Sender Description | | | |
| link@donotreply.com | | | | |
| Test Test Connection | Click the button to test the above email configuration | | | |
| | Save Close | | | |

7. After these changes all services will restart automatically. System should have SMTP server setting for data emailing now

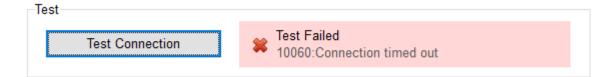
Correct SMTP server setting can be checked with following procedures:

- 1. Click on "Test Connection" button
- 2. Enter Email Address to receive test email and click "OK" button

| Link Admin Utility | \times |
|------------------------------|----------|
| Enter the test email address | |
| | |
| OK Cancel | |

3. If correct SMTP settings are made, Admin Utility will display "Test Successful" message and test email will be received in Email address entered in step 2. If there is error in setting, Admin Utility will display error message

| Test | |
|-----------------|-------------------|
| Test Connection | ✓ Test Successful |
| | |



Enable Data Export

Export feature is disabled for default install. Follow below procedures to enable export.

Note: Ensure correct SMTP server setting is set before enabling data export

- 1. Click on "Reporting Service" tab in Link Admin Utility.
- Select Powershield button to send data emails to <u>data@powershield.co.nz</u> or select Other button and enter in email address to receive data export emails. Selecting both options will send data emails to both email address

Note: multiple email address can be listed separated by comma

3. Edit file size per email if needed

| Link Admin Utility | | × |
|--|---|---|
| Alarms Email Settings Reporting Service Backup Services Maintenance | Remote Reporting Service The Remote Reporting Service requires a separate subscription with PowerShield Limited or an authorised PowerShield partner. For more information visit http://powershield.com Exports Service Powershield Other File size per email Size of files per email (kb) 2000 | |
| | | |

4. Enter Organization details then click "Save" button

| 0 | | | | | | |
|----|-----|----|----|----|----|-----|
| -0 | ra: | an | 17 | at | 10 | n |
| - | · | | - | | | ••• |

| Company Name | Facility Name | |
|--------------|---------------|-------|
| Company Name | Facility Name | |
| City | Country Code | |
| City Name | US | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | Save | Close |

After these changes all services will restart automatically. System should have export feature enabled after service reset.

Disable Data Export

 Click on "Reporting Service" tab in Link Admin Utility. Ensure both tick boxes under Exports/Service tab are unchecked then click "Save" button

| Link Admin Utility | | | | × |
|--|--|------------|-----------|-------|
| Alarms | Remote Reporting Service | | | |
| Email Settings | | | | |
| Reporting Service Backup Services Maintenance | The Remote Reporting Service re Limited or an authorised Powers <u>http://powershield.com</u> Exports Service Powershield Other File size per email Size of files per email (kb) 2000 | | | |
| | Organization Company Name | Facil | ity Name | |
| | Company Name | | lity Name | |
| | City City Name | Cour US | ntry Code | |
| | | | | |
| | | | Save | Close |

After these changes all services will restart automatically. System should have export feature disabled after service reset.

Enable Email Alarm Notification

Email Alarm Notification feature is disabled for default install. Follow below procedures to enable this feature

Note: Ensure correct SMTP server setting is set before enabling Email Alarm Notification

- 1. Click on "Alarms" tab in Link Admin Utility
- 2. Select Enable email notifications option
- 3. Edit **Time Window** and **Email Limit** if needed **Note:** Alarm emails will be only sent during Time Window set
- 4. Click "Save" button. After these changes all services will restart automatically.

5. Open Link Client

6. Select **Users** tab. Select one user (which is in use) and click **Edit** button

| Alarm Notification | | | | | | - 🗆 | × |
|--------------------|----------------|-----------------|------------|----------|--------|-------------------|---|
| Connect View Help | | AA - - - | | 4 | 0. | A a b b | |
| Dashboard | 🖶 Add | 🗱 Delete | 🥏 Edit | 🔄 Cancel | Nave 🔚 | 🔑 Change Password | |
| 🚱 Alarm Status | Users | | Settings | | | | |
| Reports | Username | | | | | | |
| Real-Time - | ADMIN GUEST | | User nam | le | ADMIN | | |
| Summary | USER | | Email Ad | dress | | | |
| 📟 Detail | | | | | L | | |
| Graph By - | | | Work Pho | one | | | |
| 🛃 Event | | | SMS Nur | nber | | | |
| 🚰 Trend | | | | | | | |
| 👔 Day | | | Other | | | | |
| Data Transfer 👻 | | | Access | | Admin | ~ | |
| 🛓 Downloads 🛛 🔍 💶 | | | | | | | |
| Communications | | | Send Em | ail | | | |
| Settings - | | | Send SM | 0 | | | |
| 🧟 Users | | | Seria Sivi | 3 | | | |
| Systems | | | | | | | |
| Battery Types | | | | | | | |
| Security | | | | | | | |
| Alarm Notification | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 4.0.1.17 | | | | | | | |

7. Enter Email Address, click "Send Email" option then click "Save" button

| C Edit | 納 Cancel | ave 🔚 | 🔑 Change Password |
|----------|----------|-------|-------------------|
| Settings | | | |
| User na | me | ADMIN | |
| Email A | ddress | | |
| Work P | hone | | |
| SMS N | umber | | |
| Other | | | |
| Access | | Admin | ~ |
| Send E | mail | | |
| Send S | MS | | |

8. Alarm notification email will be sent to email address entered in step 7, if alarms are raised

Alarm notification setting can be checked with following procedures:

1. Click on "Test" button

| Test | |
|------|--|
| Test | Click the button to test the above email configuration |

2. Enter Email Address to receive test email and click "OK" button

| Link Admin Utility | Х |
|------------------------------|---|
| Enter the test email address | |
| | |
| OK Cancel | |

3. If correct alarm notification settings are made, Admin Utility will display "Test Successful" message **and** test email will be received in Email address entered in step 2. If there is error in setting, Admin Utility will display error message

| I Sent Successfully |
|---------------------|
| aı |

| Test | | |
|------|---|--|
| Test | Test Failed 10060:Connection timed out | |

Enable SMS Alarm Notification

1. Configure the "Email to SMS" gateway in the Link Admin Utility.

Link uses an Email to SMS gateway service to send SMS messages. Link sends a standard email to this service. The service then converts that email to an SMS and sends it to the SMS number. If no internal gateway service is available at the customer premises a third party service will be required.

| Link Admin Utility | | | × | | | |
|---|---|--------------------------|-----------------|--|--|--|
| Alarms | Email to SMS Gateway | | | | | |
| Email Settings Email to SMS Reporting Service Backup Services | Parameters To specify where to insert the number into the er To specify where to insert the alarm message int | - | | | | |
| Maintenance | Email Format | | | | | |
| | Address Format | | | | | |
| | sms-number@example.org | | | | | |
| | Subject Format | | | | | |
| | Link Alarm | | | | | |
| | Email Message Body | | | | | |
| | sms-message | | | | | |
| | Test Click the bu | utton to test sending an | SMS | | | |
| | Please refer to the PowerShield Link Ad | dmin Utility Instructio | ons for support | | | |
| ✓ Last configuration save | ed at 22/01/2020 2:50:24 PM | Save | Close | | | |

These fields need to be configured to match the format of the email as required by the selected SMS gateway service. These requirements will be different between SMS gateway services.

a. Address Format:

This represents the email address where the alarms are sent. When sending a notification email Link will replace the word "sms-number" with the actual SMS numbers for each Link user who has entered an "SMS Number" and enabled the "Send SMS" checkbox.

b. Subject Format:

This is the subject of the email. The word "sms-number" can also be used in this field.

c. Email Message Body:

This represents the contents of the email. When sending a Notification email Link will replace the word "sms-message" with the details of the Link alarm. The word "sms-number" can also be used in this field.

Do not enter SMS numbers directly in to these fields.

2. Specify the SMS number to send notification messages to

- 1. Open Link Client.
- 2. Select the Users tab.
- 3. Select a valid Link "Username" from the "Users" List or click the "Add" button to add a new one.
- 4. Enter the SMS number into the "SMS Number" field.
- 5. Tick the "Send SMS" check box.

| 萬 Link - Battery Management | | | | | | - | | \times |
|-----------------------------|----------------|----------|----------|----------|--------|----------|--------|----------|
| Connect View Help | | | | | | | | |
| 📾 Dashboard | - Add | 🗱 Delete | 📝 Edit | 🥎 Cancel | 🔚 Save | 🔑 Change | Passwo | ord |
| 强 Alarm Status | Users | | Settings | | | | | |
| Reports | Username | | | | | | | _ |
| Real-Time - | ADMIN GUEST | | User nan | ne | ADMIN | | | |
| Summary | USER | | Email Ad | dress | | | | |
| 🖳 Detail | | | | | | | | |
| Graph By 🝷 | | | Work Ph | one | | | | |
| M Event | | | SMS Nu | mber | 1 | | | |
| 🚰 Trend | | | | | | | | |
| 👔 Day | | | Other | | | | | |
| Data Transfer - | | | Access | | Admin | ~ | | |
| 🛓 Downloads | | | Access | | Admin | Ť | | |
| Communications | | | Send Em | nail | | | | |
| Settings - | | | | | _ | | | |
| 🥵 Users | | | Send SM | 15 | | | | |
| 💂 Systems | | | | | | | | |
| Battery Types | | | | | | | | |
| Security | | | | | | | | |
| Alarm Notification | | | | | | | | |

Disable Email Alarm Notification

- 1. Click on Alarms tab in Link Admin Utility
- 2. Untick Enable email notifications option
- 3. Click "Save" button. After these changes all services will restart automatically.

| Link Admin Utility | | × |
|---|-------------------------|---|
| Alarms | Emailing Battery Alarms | |
| Email Settings Reporting Service Backup | Notifications | |

4. No email will be sent after alarm is raised once email alarm notification feature is disabled

Edit Battery Alarms Setting

Notice: The settings on this page only affect Sentinels/B2000s. Controllers contain their own clearing logic and are unaffected by these settings.

1. Click on "Alarms" tab in Link Admin Utility

2. Select Battery Alarms tab

Link Admin Utility

Hourly Daily ReWeekly

| Alarms | Emailing Battery Alarms | | | | | |
|-------------------|--|--|--|--|--|--|
| Email Settings | Auto Clearing | | | | | |
| Reporting Service | Schedule: | | | | | |
| Backup | | | | | | |
| Services | This is the schedule that Link uses to clear battery alarms from the monitor. | | | | | |
| Maintenance | battery alarms from the monitor. | | | | | |

3. Auto Clearing Schedule maybe edited with Hourly, Daily, Weekly options

| Auto Clearing | |
|---|--|
| Schedule: This is the schedule that Link uses to clear battery alarms from the monitor. | |
| Schedule: | |
| Hourly ~ | |

4. Time window for alarm reactivation maybe edited to reactivate alarm at faster or slower rate

| Reactivation | | |
|---|------|-------|
| Time Window: If the same fault condition reoccurs within this time window, the alarm is reactivated in link. | | |
| 24 Hours | | |
| Impedance Time Window: If the same impedance related fault condition reoccurs within this time window, the alarm is | | |
| 48 Hours | | |
| | | |
| | | |
| | Save | Close |

5. Click Save button to save changed settings. New settings will be applied after automatic service restart

Database Backup

- 1. Click on "Backup" tab in Link Admin Utility
- Click on "Backup" button.
 Note: Ensure Link.fdb database is located in C:\Program Files (x86)\PowerShield\Link Server\Database directory

| Link Admin Utility | | | | | | | × |
|-------------------------------------|----------------|---------|-------|---------|-----------------|----------------|------------|
| Alarms | Backup | Restore | | | | | |
| Email Settings Reporting Service | Backup History | | | | | | |
| Backup | Name | | Strin | Monoblo | First Discharge | Last Discharge | First Memo |
| Services | | | | | | | |
| Maintenance | | | | | | | |

3. Once backup is completed, backup file will appear in **Backup History** screen

| Link Admin Utility | | | | | | | × |
|-------------------------------------|----------------|--------|-------|---------|-----------------|----------------|------------|
| Alarms | Backup | Restor | е | | | | |
| Email Settings Reporting Service | Backup History | | | 1 | | 1 | |
| Backup | Name | | Strin | Monoblo | First Discharge | Last Discharge | First Memo |
| Services Maintenance | Enk_26-03-2 | _ | 3 | 120 | - | - | - |

Database Restore

- 1. Go to "Services" tab then **stop** all services (Detailed instruction on **stopping services** is listed in page 10)
- Rename Link.fdb to link test.fdb.
 Ensure Link.fdb database is not located in C:\Program Files (x86)\PowerShield\Link Server\Database directory
- 3. Click on "Backup" tab in Link Admin Utility
- 4. Select backup file then click "Restore" button.

Note: Restore button is disabled if backup file is not selected

| Link Admin Utility | | | | | | | × |
|-------------------------------------|-----------------|----------------|-------|---------|-----------------|----------------|------------|
| Alarms | Backup | Restore | | | | | |
| Email Settings Reporting Service | Backup History | Backup History | | | | | |
| Backup | Name | | Strin | Monoblo | First Discharge | Last Discharge | First Memo |
| Services | E- Link_26-03-2 | 018_1.fbk | | | | | |
| Maintenance | - Controller | | 3 | 120 | - | - | - |

- 5. Once restore is completed, start all services then start Link
- 6. Link should be running with restored database

Start/Stop Services

1. Click on "Services" tab in Link Admin Utility

| Alarms | Start All Stop A | All |
|--------------------|---------------------|---------|
| mail Settings | Service Name | State |
| porting Service | LinkGuardianService | Stopped |
| Backup Services | PsMonitorServer | Stopped |
| Aaintenance | PsReportServer | Stopped |
| | PsImporter | Stopped |
| | PsExporter | Stopped |
| | PsEmailDispatcher | Stopped |

When services are in Stopped state, click "Start All" button.
 State of service will be changed to Starting... then to Running state
 Note: Services are properly running once they are in Running state

| Link Admin Utility | | | | | Х |
|--------------------|---------------------|------------|--|----------|---|
| Alarms | Start All S | top All | | | |
| Email Settings | Service Name | | | State | |
| Reporting Service | LinkGuardianService | | | Running | |
| Backup Services | PsMonitorServer | | | Running | |
| Maintenance | PsReportServer | | | Running | |
| | PsImporter | | | Running | |
| | PsExporter | PsExporter | | Starting | |
| | PsEmailDispatcher | | | Starting | |

When services are in Running state, click "Stop All" button.
 State of service will be changed to Stopping... then to Stopped state
 Note: Services are fully stopped once they are in Stopped state

| Link Admin Utility | | | | × |
|--------------------|----------------|----------|----------|---|
| Alarms | Start All | Stop All | | |
| Email Settings | Service Name | | State | |
| Reporting Service | LinkGuardianSe | rvice | Stopped | |
| Backup Services | PsMonitorServe | r | Stopping | |
| Maintenance | PsReportServer | | Stopped | |
| | PsImporter | | Stopped | |
| | PsExporter | | Stopped | |
| | PsEmailDispate | her: | Stopping | |
| | | | | |

Change Link to Service Edition

- 1. Click on "Maintenance" tab in Link Admin Utility
- 2. Select "Service Edition" option

| Link Admin Utility | | | | | | |
|--------------------|-----------------|-----------------|-----------------|--|--|--|
| Alarms | Link | Database Repair | Database Tables | | | |
| Email Settings | Mode | | | | | |
| Reporting Service | | | | | | |
| Backup | 05 | tandard Edition | | | | |
| Services | Service Edition | | | | | |
| Maintenance | | | | | | |

- 3. Click "Save" button. Changes will be applied once all service restarts
- 4. Open Link Client. Go to Help-> About. Link Edition should be displayed as Service

| Link | | | | | |
|------------|--|-----------|--|--|--|
| About Link | | | | | |
| | Link Software PowerShield Battery Management Syst | | | | |
| | Link Edition: | Service | | | |
| | Client Version: | 4.0.1.17 | | | |
| | Server Version: | 4.0.1.17 | | | |
| | Server Address: | localhost | | | |

Change Link to Standard Edition

- 1. Click on "Maintenance" tab in Link Admin Utility
- 2. Select "standard edition" option

| Link Admin Utility | | | | | | |
|--------------------|--------------------------------------|--|--|--|--|--|
| Alarms | Link Database Repair Database Tables | | | | | |
| Email Settings | Mode | | | | | |
| Reporting Service | | | | | | |
| Backup | Standard Edition | | | | | |
| Services | ○ Service Edition | | | | | |
| Maintenance | | | | | | |

- 3. Click "Save" button. Changes will be applied once all service restarts
- 4. Open Link Client. Go to Help-> About. Link Edition should be displayed as Standard

| Link | | | |
|------|---|--------------|--|
| | About Link | | |
| | Link Software PowerShield Battery Manage | ment Systems | |
| | Link Edition: | Standard | |
| | Client Version: | 4.0.1.17 | |
| | Server Version: | 4.0.1.17 | |
| | Server Address: | localhost | |

Save System Summary

1. Click on "Maintenance" tab in Link Admin Utility

2. Click "Save Summary File" button

| Link Admin Utility | | | | × |
|--|-------|-------------------------------------|--------------------------|---|
| Alarms Email Settings Reporting Service Backup Services Maintenance | 0 | Standard Edition Service Edition | Database Tables | |
| | Syste | | nmary File nmary File | |

 Choose directory to save summary file and enter in filename then click "Save" button .pws file will be generated in selected directory
 Note: Saving may take few minutes if database size is large

| Save As | - | - | × |
|--|--------------------------|--|--------|
| $\leftrightarrow \rightarrow \land \uparrow$ | > This PC > Documents > | ✓ ♂ Search Docum | ents 🔎 |
| Organize 🔻 Ne | ew folder | | |
| Quick access Desktop Downloads Documents Pictures Music Videos OneDrive This PC 3D Objects Desktop Documents Documents | | Date modified Type 20/02/2018 3:34 PM File folder | Size |
| File name: Save as type: | PowerShield Summary File | | ~ |
| Hide Folders | | Save | Cancel |

Email System Summary

1. Go to Link Server Directory (C:\Program Files (x86)\PowerShield\Link Server) and open LinkAdminUtility.ini

| | ^ | Name | Date modified | Туре | Size |
|-------|---|--------------------|--------------------|--------------------|-----------|
| SS | | 🖄 преаузд.ан | 11/02/2013 10:30 | Application extens | 1, IDI KB |
| , | e | 🚳 libssl32.dll | 11/02/2013 10:35 | Application extens | 264 KB |
| ds 🤉 | | 📑 LinkAdminUtility | 15/09/2017 4:09 PM | Application | 1,728 KB |
| its 🤉 | | LinkAdminUtility | 20/02/2018 3:32 PM | Configuration sett | 3 KB |
| 115 7 | | LinkUtils | 15/09/2017 4:13 PM | Application | 7,279 KB |

2. Enter Email address to receive system summary file under Maintenance tab **e.g.** Email=someone@gmail.com

```
[Maintenance]
Path=C:\Program Files (x86)\PowerShield\Link Server\Maintenance
DumpTables=1,27,28,12,13,14,15,16,29,55,77,74,75,78
Logs=C:\Program Files (x86)\PowerShield\Link Server\LOG
Email=email service
Gfix=C:\Program Files\Firebird\Firebird_2_5\gfix.exe
```

- 3. Open LinkAdminUtility.exe file and click "Maintenance" tab
- 4. Click "Email Summary File" button

| Alarms | Link Database Repair Database Tables | | | | | |
|-----------------------------|--------------------------------------|--|--|--|--|--|
| Email Settings | Mode | | | | | |
| Reporting Service Backup | Standard Edition | | | | | |
| Services | O Service Edition | | | | | |
| Maintenance | | | | | | |
| | System Summary | | | | | |
| | Save Summary File | | | | | |
| | Email Summary File | | | | | |

5. Email should be sent to email address listed in Step 2

Database Repair

- 1. Click "Database Repair" tab in "Maintenance" Screen
- 2. Click "Run" button
- 3. If there are any errors in database, it will be fixed

| Link Admin Utility | | | | | | | 2 |
|---|----------------------|------------|-----------------------|-----------------|--------------------|----------------------------------|----------|
| Alarms | Link D |)atabase (| Repair Database | Tables | | | |
| Email Settings Reporting Service Backup | □ Valida ☑ Valida | | ☐ SweepDB ☑ MendDB | □ List □ Che | LimboTrans ckDB | ☑ IgnoreChecksu □ KillShadows | m Run |
| Services Maintenance | Running. Finished | | | | | | |
| | | | | | | | |
| | | | | | Sa | ive | Close |

Database Tables

- 1. Click "Database Tables" tab in "Maintenance" Screen
- 2. Table Counts displays number of entries in database table

| Link Admin Utility | | | | | × |
|-----------------------------|-------|--------------------------|-----------------|------|-------|
| Alarms | Link | Database Repair | Database Tables | | |
| Email Settings | Table | Counts | | | |
| Reporting Service Backup | | | | | |
| Services | 3 | Clear | | | |
| Maintenance | 6 | Clear | | | |
| | | Clear | | | |
| | 0 | Clear | | | |
| | 0 | Clear | | | |
| | 0 |) Import Histories | | | Clear |
| | | Recount | | | |
| | Confi | g Updating Flag Clear | | | |
| | | | | Save | Close |

3. Click "Clear" button to remove certain types of entries in database table

3 Reports

Clear

4. Click "Recount" button to reload entry counts in database table

| 0 Import Histories | Clear | |
|--------------------|-------|--|
| Recount | | |

5. Click "Clear" button to clear "Config Updating Flag"

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