Version No: Issue Date: Portfolio:

Horizons Regional Council

Hydrology Operations

Manual

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LoggerNet Site Setup: Quick Guide

Overview:

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This is a quick start guide to setting up a site on the LoggerNet telemetry system. For more detailed information refer to <u>cd om 21.5 LoggerNet Telemetry Basics</u> and

cd om 21.5 Appendix1 Setting up a Comms Path

Preparation and information required:

To setup the site on the telemetry system some initial information is required

• The full Hilltop Site Name as viewed on Manager or the site index, this is important for the data transfer processes

- The Site 3 letter code, *XXX*
- The *Logger type* installed, 10xPB, CR80 etc
- The *Pakbus address* of the Logger
- The comms paths available for the site, Radio and IP addresses

For Site name is best found from the Site Editor in Hilltop Manager, this will give the correct spelling and site name as well as the 3 letter code; usually stored as the Second Synonym.

The Pakbus Address of the Logger should be unique and for the radio sites the radio ID will need to match the site Pakbus address. The Pakbus address schema is broken into comms path groups and can be found at H:\Hvdrology Sites\General Site Information\Logger Software\MK100 base Software\Pakbus ID.xlsx

Pick a free ID for the site.

Initial LoggerNet Setup:

Sites should be added based on the Primary comms path with priority on the radio group. Some care will need to be taken if a site has dual comms with radio and phone as this could cause scheduling issues. All groups can initiate UDP and TCP with conflict.

- 1. Add a Phone remote to the Phone base with a Pakbus port and appropriate logger type
- 2. *Rename* the Phone remote as Call XXX (site code)
- 3. set the *Phone Number* to the Hilltop Site name, add the actual connection details as a note, ie UDP IP or Ph number
- 4. Check the PakBus Port settings, set the Beacon interval to 0
- 5. *Rename* the Logger to the Hilltop site name
- 6. *Disable* the call-back
- 7. Set the *Pakbus Address*
- 8. Add any Notes relative to the site, include the site 3 letter code XXX
- 9. Apply
- 10. Select the View Menu and Configure Subnets
- 11. Add the site to the correct Group

Before setting up the schedule and data files the comms path needs to be defined

Comms Setup:

The comms paths are set in the SQL database so LNComms can access the settings for each site. The database is edited using Hilltop Telemetry

- 1. On Hilltop telemetry open the *edit menu* and choose Sites
- 2. Add New and enter the full Hilltop site name
- 3. Set the *Logger Type* to LoggerNet
- 4. Set the Primary and Secondary Modems with phone numbers or IP addresses in the comms address field
- 5. Enter the number of tries for each modem, suggest 2 for each with dual comms
- 6. Save

Setting the file storage:

The data is stored in two places, first as the dat file in the loggerNet Telemetry directory on Ares\Telemetry and second in the SQL database ready for update into the Hilltop files

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Setting the .dat file storage:

- 1. Add a directory to <u>\\ares\Telemetry\Loggernet Telemetry</u> with the name as the full Hilltop Site Name
- 2. On LoggerNet Setup screen open the Data Files Tab and select "*Get Table Definitions*". This will interrogate the site and return the data tables
- 3. *Map* the data tables to the LoggerNet Telemetry Directory with the site 3 letter code as the Prefix. i.e. XXX-Data_5min.dat
- 4. Enable the Scheduled Data Collection, check the interval and number of retries to match the Telemetry setup
- 5. Open the Status Monitor and *call* in the site
- 6. Check the LoggerNet Telemetry Directory and ensure the .dat files are correct

Setting the data storage:

The Hilltop files are populated from the SQL database tables based on the names of the site tables and defined variable names. A transfer table is used in Hilltop to make the translation from Datalogger name to Hilltop datasource, it is therefore important to follow the correct naming conventions.

The "List of available data Tables.xlsx" spreadsheet contains the current transfer table format.

The populate the SQL database the sites need to be selected in LNDB manager

- 1. Open LNDB Manager
- 2. On the Setup Tab select the new site and check the tables for storage
- 3. Apply
- 4. On the *Data Review* tab check each table for consistency

The automated processes will now update the site data into the Hilltop files

To check the SQL database output use: <u>LoggerNet_SQLConnect.dsn</u> With the data stored in the hilltop file <u>LoggerNet_SQL.HTS</u> before updating into Hydrotelemetry