

PQLX Version 2011.365.P1

Release Notes

This document describes the various modifications to PQLX version 2011.365. As this is the first patch release, this release is now named/versioned as **2011.365.P1**.

This document is organized into the following sections:

- Documentation Updates
- Enhancements
- Minor Improvements
- Major Bug Fixes
- Minor Bug Fixes

Documentation Updates

The following document updates are provided with this release:

Document Name	Description
PQLX/README.txt	Updated
PQLX-0_Compilation_&_Installation.pdf	New document describing the compilation and installation process
PQLX-3_DB_Administration.pdf	Updated
PQLX-7_XML_Input.pdf	Describing importing channel meta-data information and Seismic Event Information
PQLX-8_Travel_Time_Tables.pdf	Describing how to import travel-time tables for usage in PQLX
PQLX-Bug_Reporting.pdf	New document describing how to report bugs
PQLX-Support_Services.pdf	New document describing how to request support

Enhancements

Two enhancements to the server program '**pqlxSrvr**' are included with this release and are detailed as:

1. File scanning of mini-SEED files has been made more efficient, resulting in the directory scanning task of the server program finishing much quicker.
2. EventQ processing has been enhanced to guarantee, when possible, that no two event processors are processing data of the same channel at the same time. This addresses a possible bottle-neck scenario created when multiple event processors are processing data of the same channel at the same time.

Minor Improvements

Some minor improvements are provided, detailed here, organized by program:

Program Name	Description
pqlxCron.sh	Check for existence of PQLXprodVars before proceeding
pqlxSrvr	Better message on missing env variable PQLXTRASH
pqlxSrvr	Updated faulty DB upgrade message on failure
pqlxSrvr	Server now verifies that pqlxDBMaint program has completed (i.e., it is not running) before proceeding. If pqlxDBMaint is running, server will pause until it has completed.
pqlxSrvr	Do not allow trace files having a start time before 1970 to be input to the database
pqlx: Controls Panel: Bug Reports Side-Bar Button	Added a hyperlink to automatically open PQLX Bugzilla web-site in a browser window
pqlx: Filter Management	1) Dialog layout modernized 2) Pull-down menu modified: Manage renamed to Edit and moved to the bottom of the list 3) Both "Custom..." and "Edit..." entries now available in STN viewer, i.e., it is no longer necessary to go to Trace Viewer to define a new filter
pqlx: STN: Particle Motion	Channel data is now pre-scaled when the gain differs between the two channels to make all values one-to-one comparable
pqlx: STN: Y-Axis Scales Functionality	Added a new tab to the Y-Axis scales dialog, HELP, describing procedure and usage
pqlxDBMaint	Confirm integrity of GLAP table contents
Database Connections	Gracefully handle dropped and/or lost MySQL connections. Lost connections are now recognized, internally handled, and automatically recovered. Previous functionality caused all subsequent MySQL queries to fail.
Default DB Definition	Add channel group SN* to PSD configuration defaults
Database	Modify GLAP.startPt, GLAP.endPt, and TRC.nsamps column definitions to handle channels having high sample rate

Major Bug Fixes

A few major bug fixes are provided in this release, detailed here, organized by program:

Program Name	Description
pqlx: PSD	Potential crash on certain platforms when attempting a PSD:Detail sub-select
pqlx: PSD	Possible crash when cycling through large list of PDF's
pqlx: PSD: Detail	Crash on PSD Hour sub-select

Program Name	Description
pqlx: PSD: Request	Transferring Request PDF to Detail tab could result in wrong channel of data being referenced in Detail screen
pqlxPNG	Crash when providing PDF data using --inputPDF option

Minor Bug Fixes

Many minor bug fixes are provided in this release, detailed here, organized by program:

Program Name	Description
env/makeAll	Bug fix on setting default Fortran compiler
makefiles	Various makefiles throughout the system updated to work successfully on newer LINUX releases
pqlxSrvr	Crash on system PDF calculation when many many PSDs are to be processed
pqlxSrvr	Default temporary table size up-ed to 32Mb from 16Mb; otherwise, channels with many many PSD's do not end up having system PDF being generated
pqlxSrvr	Handle 1000sps data when computing end time of trace - where (1000/1000000. = .00100000005) instead of .000999999 as it should be
pqlx: About Dialog	Fixed crash on MAC platform when invoking dialog
pqlx	Do not call gdk_beep() from within a separate thread, could result in crash
pqlx	Would not connect to a DB if it contained only one trace for each of all its channels
pqlx: PQL : Filter Mgmt Dialog	Bug fix when no user defaults file yet exists
pqlx: PQL	Address crash when displaying channel meta-info on channel label mouse-hover
pqlx: PSD: Detail	Side bars would not display properly the first time when coming from STN due to an update in GTK+
pqlx: PSD	Possible crash on spectro list navigation when NULL is (validly) returned for channel name
pqlx: STN	Address crash when cycling through display lists of data
pqlx: STN	Bug fix on side-bar color modification via controls panel
pqlx: STN	Crash on selecting label (or data selection) for station having no channels on display
pqlx: STN	Applying a filter after data had been taken to Analysis did not display transform of all data points
pqlx: STN	Bug fix when selecting data around stations having no channel data on display (due to Channel Filter being applied)
pqlx: STN: Analysis	Transform description string was not being reset when taking

Program Name	Description
	new traces into Analysis
pqlx: STN: Analysis	Bug fix on first apply of transform to sub-set of data on display
pqlx: STN: Analysis	Bug fix on returning selected trace to Original status
pqlx: STN: Analysis: Deconvolve	Failed when being applied to more than one trace
pqlx: STN: Analysis	Crash when taking new traces to ANA tab, after one or more traces on ANA tab had been selected
pqlx: STN: Analysis	Bug fix when aligning on phase (X-Axis), and traces do not start at the same time
pqlx: STN: Analysis: Particle Motion	1) De-meaning was not using proper value for mean 2) Modified to default BHN=0 and BHE=90 degrees when no channel Meta-data is available 3) Crash when no channel Meta-data is available, and when event is selected
pqlx-admin	PNG settings now properly saved/retained on DB Create request
pqlx-admin	Editing data directories - action not applied to proper row
pqlx-admin	Closing servers dialog using WM 'X' would result in dialog not being able to opened a 2nd time
pqlx-admin: Exec/Logs	Bug fix on refresh of EVENTQ list display
pqlxPNG	Handles the case when, for the --inputPDF option, the required header row is missing. This can happen when piping the output from the PQLX extract scripts and failing to specify the --PNG option
PQLXDataDirectory.sh	Bug fix when trying to add new directory when name is a longer version of already existing directory