Feature Summary PressureMAP 29.xx & PressureWEB 4.xx

This document identifies the important new features that are included in PressureMAP 29.xx and PressureWEB 4.xx. It does not attempt to explain all of the engineering work that was completed on the product, much of which pertains to keeping current with the evolving industry-standard changes to the Linux operating system and supported applications and tools. The attempt here is to describe the key features added to the software that may be of interest to the end user.

PressureMAP Modifications

Operating System / Server / Installation

- Support is now available for the CentOS 6.x operating system. This includes the restore/rebuild function in System Administration that makes it possible for users to migrate from CentOS 5.5 to CentOS 6.x.
- There is now an option to create PressureMAP Users in IT Hosted installations. By default the
 PressureMAP System installation does not create user accounts. These needed to be created manually.
 With Version 29 the installation scripts now checks the environmental variables CREATE_MAP_USER and
 CREATE_ALL-USERS. If these are set, the MAP User and/or all default PMAP Users are created,
 respectively.
- Media content for the current version of PressureMAP now exceeds one compact disc. Consequently, for customers who have hardware that does not support the larger capacity DVDs, a two-CD MAP system installation package is now available.
- A platform certification package has been created for situations where a customer wishes to install the PressureMAP/PressureWEB system on their own preconfigured system. The two most common examples are the IT Hosted version or when Redhat EL is mandated (rather than CentOS). A new script assists in evaluating whether or not the customer-configured server meets the requirements for installing IT Hosted PressureMAP. This script first runs the same system/hardware scan that occurs during a traditional PMAP installation, then attempts to install the new certification package (using the force option in case this is already installed).
- The Digi PortServer TS 16 driver has been updated to 1.9-36, which is required for the CentOS 6.x operating system. The upgrade will be included on new PressureMAP system installations and available as a MAP update where the user will be prompted for the password of the day to perform the Digi driver upgrade from 1.9.17 to 1.9.36.
- A new script was created to perform a hardware analysis during the installation of the PressureMAP/PressureWEB software. The script will detect minimum requirements for hardware memory, disk space, CPU Mhz, CPU chores and CPU MIPS (millions of instructions per second). A warning message will display if requirements are not met, and the user will be prompted to continue or not.

Database

The next stage in the evolution of the PressureMAP/PressureWEB product has arrived with Version 29.00 and Version 4.0 respectively. Both applications are now based on a common database: PostgreSQL, which is an open source relational database management system (RDBMS) similar to Oracle. The common database provides the infrastructure needed to develop web applications such as PressureMAP data entry, custom reports, etc. It can also provide a means of customer access to PMAP data via commonly used tools, such as Excel and Access.

General

- PressureMAP Version 29.00 includes a new System Review Report, generated monthly, which provides management personnel with the following PressureMAP system administrative and performance data: licensing information, system status, call cycles, Digi PortServer resource allocation and operation, system errors, office status, and the most frequent errors per office.
- Performing a Supplemental Update for the PressureMAP system no longer requires that all users logged into the system be notified to log out prior to initiating the update. Previously, the update application would not run unless all user were logged out. This requirement still pertains to a System Update, but is no longer necessary for Supplemental Updates.
- As part of disaster recovery preparedness, some operating companies choose to maintain a remote group of PressureMAP systems with data identical to their active systems. These remote/backup systems are regularly updated with the live system data. If the backup systems were ever to go live, the Alert Numbers for 289H LSS and uM260 monitors would still reference (call) the original systems. PressureMAP now includes a utility that globally updates IP and modem Alert Numbers for all offices in a given system. This utility could be run after the office and device data is updated, so that the backup system are ready to go at any time.
- The script of the BackupEDGE restore utility (RestoreEDGE) has been modified to check the major system revision designations only when performing a restore function. Previously, it checked the *major*, *minor* and *patch* version numbers, and if they did not match the restore was aborted. This more stringent check was a bit restraining because a system that needs rebuilding might be on an older version than what is installed on a spare computer. Now if the versions do not match, the software prompts you to perform a forced PressureMAP update using the correct version after the rebuild to ensure that the proper files are in place.
- It is possible, beginning with PressureMAP Version 29.01, to use an iPhone to obtain latitude and longitude coordinates for an office and/or monitoring device location and send them via the phone's email application to the PressureMAP server. Submitted data can then be updated to the PressureMAP system using Supplemental Update media.
- BackupEDGE has been modified to make it possible for stickmap images on a PressureMAP system to be
 restored along with office and device data when a customer rebuilds a system on a spare computer.
- CPAMS programming support has been extended to the Hercules 740 monitors. Previous version of PressureMAP provides this capability for Sparton 5300B and 5318 monitors, as well as the Chatlos L3 and Hercules 940 CPAMS monitors.

 PressureMAP has been revised to preserve the Circuit Number (CKT) for Chatlos monitors that have been replaced by 289H or uM260 monitors, even after a system update. Technicians depend on the Chatlos CKT field and need this information. Previously, when an office was converted to a new version via *portdata*, the CKT value was not included in the new history file. Version 29 now preserves the CKT data during a version update.

PressureWEB Features

This incremental update provides several important and powerful new PressureWEB features:

PressureWEB 4.1 includes a new Enterprise View utility for your PressureMAP system¹. Two viewing options are available: Data View and Map View. The highest access level to either of these options is Enterprise View, which includes all of the PressureMAP systems in an telephone operating company, organized by region, state, district and office.

Data View includes a menu-based navigational system and spreadsheet data in column format. Depending upon the selected viewing level, data includes items such as Number of Offices, Offices not Reading, Devices, Disabled Devices, Devices not Reading, Alarms, Validated Alarms, Average SQI, etc. Clicking on a specific office name generates a standard Device Status by Pipe View.

Map View replaces the grid data report with a full color geographic map. PressureMAP system locations, offices, pipe routes, etc. are overlaid on the map, and users can click on a highlighted location to generate a closer map view of the selected area. Another access point to the Map View is via a map icon located on one of PressureWEB's View Options or the Specific Device Information page.

¹ *Note*: This feature is available beginning with PressureMAP Version 29.01.

- PressureWEB 4.0 makes it possible to add, edit and delete office and device data within the PressureWEB web browser. Access to this feature is available from a new drop-down *Edit* menu located on PressureWEB's main navigation bar. The Edit menu appears on designated PressureWEB pages, such as *All Offices, My Offices, Device Status Views* and *Specific Device Information*. Like the original PressureMAP text editor used for data entry, PressureWEB's editor also requires a separate password for access. To complete the database editing capability in PressureWEB 4.0, two additional editing applications are provided: the MEGA Office editor and the User Management editor. Each of these applications requires a unique password to prevent unauthorized access to data.
- PressureWEB Setup preferences has been modified to include a new checkbox that enables you to eliminate some of the alarm-generated colored backgrounds that appear on the various PressureWEB displays. By default the box is checked, which results in PressureWEB producing a red background for all major (four star) alarms only. If you uncheck the box, both major and minor (one to three star) alarms will be displayed with colored backgrounds. As before, minor alarms will be shown with a yellow background color. The checkbox selection or default setting applies also to the new mapping application.
- Another Setup preferences improvement makes it possible for users to change the font size of the PressureWEB displays. This upgrade has been made primarily to allow for easier reading of display information on mobile devices. If a mobile device is used and no front size preference is designated in

Setup, PressureWEB displays will be presented in 17 pixels. This feature eliminates the need to zoom in on information displayed on the mobile device.

- PressureWEB 4.0 includes a new Pegged Devices Report, which is available as a selection on the Troubles menu located on the All Offices, My Offices, Device Status Views and Specific Device Information displays. When selected from the All/My Offices displays, the report lists the Total Flow Devices in each office, the Pegged Count in each office and the Pegged % relative to the total flow devices in the office. Clicking on an office name on the Pegged Devices for All Offices display, for example, produces a Pegged Devices by Pipe View. This display shows all pegged devices on the route(s), Access number, Address, OAU, Device Type, Current Reading, alarm status, etc.
- PressureWEB's OAU column on the various displays has been moved from its original position next to the Curr (current reading) column to the column position after Address. This eliminates possible confusion when scanning the report for reading information.
- Circuit Number (CKT) data from an original Chatlos office that has been updated to a 289H or uM260 monitor is now included on the various PressureWEB Device Status displays and the Specific Device Information display. If there is data in the CKT field of the PressureMAP device record, this information will now appear on the Specific Device Information display and on the Device Status View pages in a Circuit # column located after the Device #.
- A new Device Status by Sheath View has been added to PressureWEB 4.0. to make it possible to sort devices according to their sheath association in ascending order. Please note that it is possible for a device to be listed under multiple sheaths.
- An Alarm Type data field has been added to the Specific Device Information screen for all TX Technology monitors, such as Chatlos, Hercules, and Teleducer. This field is used for contact alarm devices that are shown as Normally Open (N/O) or Normally Closed (N/C) to determine if an alarm is either an Open or a Short.
- PressureWEB 4.0 has been modified to make it possible for a PressureMAP/PressureWEB system that
 has been moved to new hardware to be accessible to users without interruption. New functionality
 allows the System Administrator to enter the forwarding url or IP address of the new equipment so that
 users will be automatically directed to the new machine to access their office and device data.

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