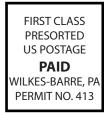


Corporate Communications 11425 Cronhill Drive Owings Mills, MD 21117





SCADA Reporting Package

The Orion-based WEBserver SCADA system now can be ordered with the Reporting Package to generate simple reports from data archived in one of more Orions. Five preformatted reports are included, and each can be generated and displayed in tabular or graphical form:

- Sum Report: Calculates the sum of all measurements recorded per the selected display interval.
- Maximum Report: Displays the maximum point value recorded per the selected display interval. This type of report may be used to highlight transformer loading over time.
- Minimum Report: Displays the minimum point value recorded per the selected display interval.
- Count Report: Displays the number of instances that data was detected per guery type unit at the selected input or output points. The count goes up every time a value greater than 0 is recorded during each display interval.
- Outage Report: Displays all "0" or "1" values for the selected input points. This report is intended to be used only with binary points such as breaker status.

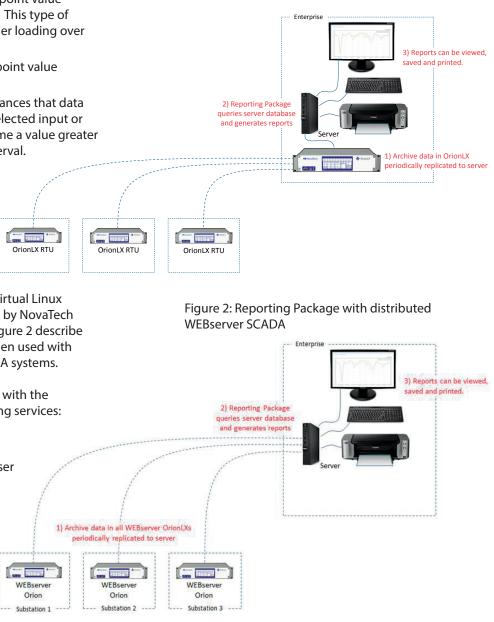


The Reporting Package runs on a virtual

Linux machine provided by NovaTech. This virtual Linux machine can run either on a server provided by NovaTech or on a user-provided server. Figure 1 and Figure 2 describe components and data flow in the system when used with centralized and distributed WEBserver SCADA systems.

A Database Maintenance Service is included with the Reporting Package that includes the following services:

- Backup of virtual machine
- Removal of old records, specified by the user Upgrading database, virtual machine, and reporting software to the newest version
- Database vacuum
- Database re-indexing
- Log file maintenance



For more information, including report examples, please go to: www.novatechweb.com/reportingandarchiving

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UPCOMING EVENTS

2016 Symposia Series

Dates are now set for our first three Utility Technical Symposia:

April 27th

Murfreesboro, TN (Embassy Suites) Contact Kevin Johnson at 570.498.4409 or kevin.johnson@novatechweb.com

June 8th

Topeka, KS (Westar training facility) Contact Jim Siders at 913.209.2308 or jim.siders@novatechweb.com

July 19th

Columbus, NE (NPPD training facility) Contact Jim Siders at 913.209.2308 or jim.siders@novatechweb.com

2016 IEEE PES T&D Conference

May 2 - 5, 2016 Dallas, Texas

VMDAEC - Engineers & Operations Conf.

May 10 - 11, 2016 Ocean City, Maryland

LATEST SOFTWARE

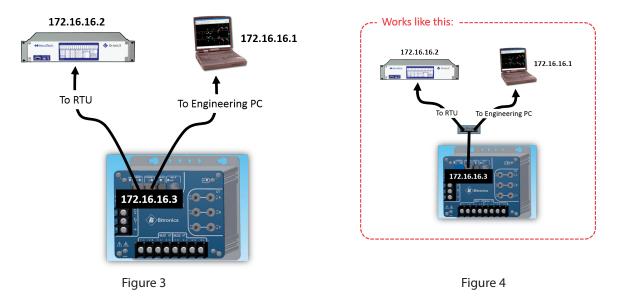
OrionLX Release: 8.8 Orion NCD3 Version: 3.29 Bitronics M87x firmware: v4.10 **Bitronics 70 Series Configurator:** v4.10 Bitronics 50 Series Firmware: v3.11 Bitronics 60 Series Firmware: v2.12 **Bitronics PowerPlex II Firmware:** v2.12 **BiView:** v3.05

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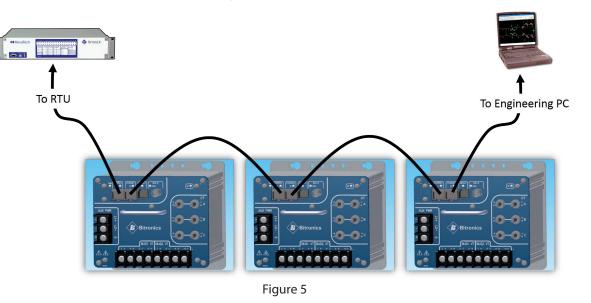
Figure 1: Reporting Package with centralized WEBserver SCADA

Did You Know?

The new Bitronics PowerPlex II includes a built in Ethernet switch to simplify interconnection. Figure 3 below shows a PowerPlex II connected to an Orion RTU and laptop PC without a separate switch. Figure 4 shows an equivalent network diagram with a three-port switch



A typical application of multiple PowerPlex II's daisy-chained with RTU and PC connection is shown in Figure 5 below:



OrionLX Training Update

A new 2016 OrionLX training class is now scheduled for June 7-8 in Lenexa, Kansas.

Other scheduled classes: October 4-5 Lenexa, KS December 6-7 Lenexa, KS

These are hands-on classes where each attendee shares an Orion. Laptop PCs can also be provided if the attendees cannot use their own PC. Please contact your NovaTech representative or Regional Manager to book a slot.

Check Out Video of New 878 Connector

Larger terminals...access from top to wire in place...wire size up to 12 gauge...and wires in a group of eight with one common. These are the new features you have been asking for on the Bitronics 878 High Density I/O and now the new connector can be ordered for use on all P3x I/O modules. There are two versions of the connector for left and right mount: P3XLADAPTER and P3XRADAPTER. These are used as follows on P3x I/O modules:

I/O Module	Adapter	Description
P30A 8-point input (or 4in/4out)	P3XRADAPTER	Right Adapter
P31 16-point input (or 12in/4out)	P3XRADAPTER and P3XLADAPTER	Both Right and Left Adapter
P33 8-pt output	P3XLADAPTER	Left Adapter

Check out the video showing operation on our website at: www.novatechweb.com/878connectorvideo

Bitronics M660 61850 Certification

The Bitronics M660 SCADA Meter has achieved third-party IEC 61850 conformance testing certification to both Edition 1 and the newer Edition 2 standards. This conformance testing assures users that the M660 will successfully interface with other IEC 61850 compliant devices and systems. Using the web-based configuration in the M660, a selection can be made between Edition 1 (more common in the industry today), and the newer Edition 2, providing the flexibility to work with existing systems while still supporting newer systems as they evolve.

DistribuTECH "Learning Center" Videos Available

Check out four recently posted videos on:

- 1. Chuck Englebrecht describing how to set up a typical SCADA RTU. This video includes step-by-step configuration of an OrionLX, a Bitronics 50 Series SCADA Panel Meter and a custom HMI webpage.
- installation and commissioning.
- solutions.

Link to videos: http://www.novatechweb.com/news/distributech-2016-presentation-videos/



IEC 61850 Edition 2 Parts 6, 7-1, 7-2, 7-3, 7-4 and 8-1 Communication networks and systems for power utility automatio



2. Bruce Muschlitz describing advanced substation technologies including PRP (Parallel Redundancy Protocol), HSR (High Availability Seamless Redundancy), IEC 61850, Merging Units and Process Bus. 3. Mark Matassa describing NovaTech capabilities in "Systems and Services" including substation RTUs,

4. Jeremy Anderson and NovaTech CIP Solutions partner, Robert Held, Tripwire, describing Cyber Security

