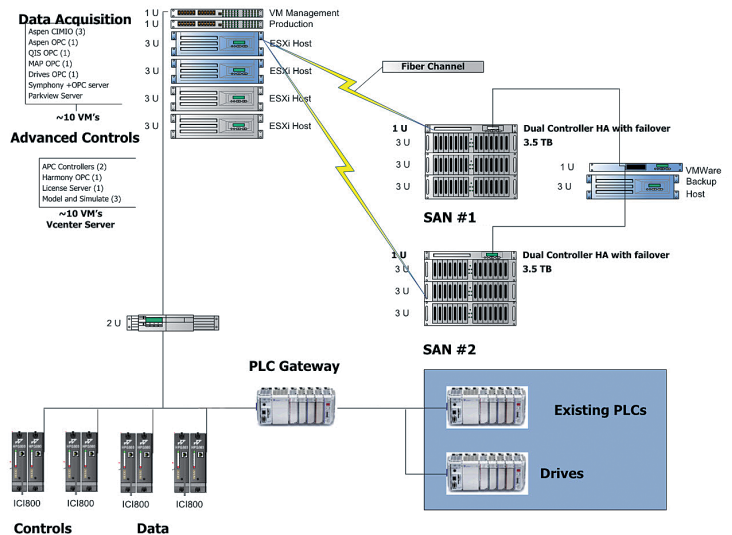# North Pacific Paper Corporation (NORPAC) evolves their DCS to latest Symphony Plus HR Series

North Pacific Paper Corporation (NORPAC) is a paper production company located in Longview, Washington. The facility uses ABB's Symphony Plus with HR Series Distributed Control System (DCS) as the prime automation platform. As part of the overall automation platform, NORPAC connects several 3rd party systems (host computers) to their DCS. The host computer applications were installed several years ago and were based on older and unsupported hardware and software components.

NORPAC's old host computer interfaces were based on older hardware and software components that could no longer be supported. The DCS included obsolete computer interface units (ICI03's) that were connected using an older SCSI (Small Computer System Interface) style interface. SCSI interface parts (computer PCI cards and cables) are becoming difficult to find and also have some limitations with cable lengths. NORPAC faced major cabling restrictions with their system, leaving their equipment in unfavorable locations. The software connection to the host computers was based on proprietary components, and was generally difficult to support and maintain. NORPAC was looking to modernize the hardware and software interfaces to their host computer applications.

ABB's solution included current hardware, software, and engineering services. The hardware included ABB's latest computer interface for the DCS, HR Series (Harmony Rack) ICI800. The ICI800 supports an Ethernet interface which allowed NORPAC to relocate the interfaces to a more suitable location. The software includes ABB's HOPC (Harmony OPC) software, which provides an industry standard interface capable of connecting to any modern application platform. ABB would also supply software engineering services to help readdress interface databases to make use of the updated system components.

Project name	North Pacific Paper Corporation (NORPAC), paper production company
Location	Longview, Washington, US
Customer	North Pacific Paper Corporation (NORPAC)
Completion	1Q 2014

ABB solution
– ABB's solution included current hardware, software, and engineering services. The hardware included ABB's latest computer interface for the DCS, HR Series ICI800
– The software comprised ABB's HOPC (Harmony OPC) software, which provides an industry standard interface capable of connecting to any modern application platform
– ABB also supplied software engineering services to help readdress interface databases to make use of the updated system components

System benefits
– The customer NORPAC has now up-to-date host computer interfaces that will be sustainable for many years to come
– NORPAC now has three virtual machines and IET800s running on HOPC servers

Power and productivity
for a better world™

ABB

NORPAC now also has a high availability cluster of three virtual machines improving reliability and redundancy. Each virtual machine will be backed up with no data lost in the case of any server failure. No single failure will shut them down.

The company now has a system which is "sustainable and maintainable and reliable and robust," says Steve Elliott, Senior Controls Engineer of NORPAC.

"The OPC interface is simple enough that the IT guys can add tags, and troubleshoot, and debug…which makes a huge impact… it is really simple." Elliott states. Prior to the upgrade, he notes that it was sometimes challenging to train IT employees on the system because it was not user-friendly.

The OPC interface is able to support multiple connections without any burden on the control system and data can be shared with nearly an unlimited number of clients. The capability of such a large client reach is extremely advantageous for expanding a business in today's world. "Going forward, it is really the only sustainable and maintainable option," declares Elliott.

In addition to the actual upgrade, ABB employees worked side by side with NORPAC through the project execution with additional services. Tag conversions from the old servers to the new OPC system was done within days whereas Elliott noted that having to complete that on his own had been a huge concern.

NORPAC now has three virtual machines and HR Series IET800s running on HOPC servers. As a result of the upgrade and the dedication of ABB employees, the project completion was a great success. NORPAC now has up-to-date host computer interfaces that will be sustainable for many years to come.

For more information, please contact:

ABB Inc.
Power Generation
Wickliffe, Ohio, USA
Phone: +1 440 585 30 87
Fax: +1 440 585 30 87
E-Mail: powergeneration@us.abb.com

www.abb.com/powergeneration

ABB S.p.A.
Power Generation
Genova, Italy
Phone   +39 010 6073 512
E-Mail: powergeneration@it.abb.com

www.abb.com/powergeneration

ABB Pte. Ltd.
Power Generation
Singapore
Phone: +65 6776 5711
Fax: +65 6776 5711
E-Mail: powergeneration@sg.abb.com

www.abb.com/powergeneration

Power and productivity
for a better world™

ABB