General Specifications

Model NTPC051
Exaquantum Virtual Private Network

Exaquantum

GS 36J40F11-01EN

■ PROBLEM

Legacy OPC connectivity relies heavily upon Microsoft technologies such as DCOM. While it provides effective application integration, DCOM also represents a potential security risk due to the requirement for extensive TCP port usage.

■ SOLUTION

Yokogawa has recognized this issue and has developed a secure access mechanism based upon Virtual Private Network (VPN) technology that enables the normal operation of legacy OPC connections without the security issues it introduces. Yokogawa customers who wish to provide effective and secure connections to the Process Control Domain can now do so utilizing Yokogawa's VPN Software Manager Exaquantum Virtual Private Network (Exaquantum/VPN).

■ KEY FEATURES

• Only a single firewall port is required
• Allows a firewall to be NAT enabled
• Enhanced network security
• RPCs (Remote Procedure Calls) cannot be executed
• Secure VPN Protocol: PPTP (Point-to-point tunneling protocol)
• Data is encrypted
• Connection initiated from the OPC server for increased security
• Redundant OPC connections supported, such as Exaopc-RD and Exaquantum/ORM
• Simple to install

■ INTRODUCTION

The VPN Software Package can operate through a single port and single protocol (GRE). Network Address Translation (NAT) is also supported.

VPN effectively encapsulates the connection allowing DCOM to run within it. As an additional security measure, the VPN connection using a Windows Firewall can be restricted further to allow only specific DCOM connections to be established through it, such as Exaopc DA, A&E, HDA and Batch.
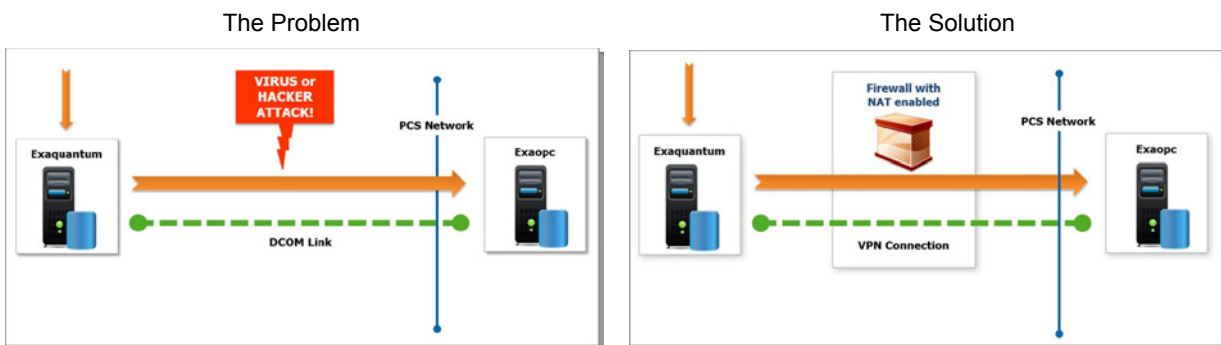
The VPN Software Package installs a small program on the OPC server (the OPC server program must run as a service) to allow a VPN connection to be initiated from the OPC server to the OPC client. If the VPN connection is lost, then this program will keep attempting to re-establish the VPN connection to the OPC client.

Exaquantum is not required.

■ SUPPORTED OPERATING SYSTEMS

Exaquantum/VPN can be installed on the following operating systems.
• Windows Server 2012 R2 Standard
• Windows Server 2012 Standard
• Windows Server 2008 R2 Standard SP1

The Problem

The Solution

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■ MODELS AND SUFFIX CODES

Exaquantum/VPN Product

		Description
Model	NTPC051	Exaquantum/VPN Product
Suffix Codes	-S	Basic Software License
	1	New Order (with Media)
	1	English version
	-SV□	Enter the number of VPN Manager Licenses (one per OPC server) (1 - 9)
	-YYY	Select an Option Code
Option Code	/SR□	Enter the number of Redundant Exaquantum/VPN Licenses (one per redundant OPC server) (1 - 9)

Maintenance Service for Exaquantum/VPN

		Description
Model	NTMC051	Maintenance Service for Exaquantum/VPN
Suffix Codes	-S	Annual Contract
	1	Always 1
	1	Always 1
	-SV□	Enter the number of VPN Manager Licenses (1 – 9)
	-YYY	Select an Option Code
Option Code	/SR□	Enter the number of redundant Exaquantum/VPN Licenses (1 - 9)

■ ORDERING INFORMATION
Specify the model and suffix codes.

■ TRADEMARKS
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